

KV-21XRD/21XRTD

RM-664

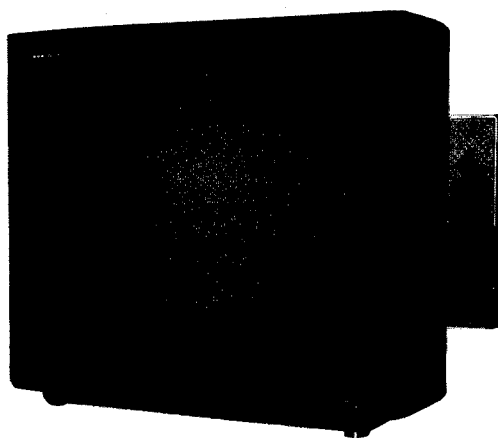
SERVICE MANUAL

AEP Model

KV-21XRD Chassis No. SCC-784A-A

KV-21XRTD Chassis No. SCC-784C-A

July, 1986



SX

CHASSIS

SPECIFICATIONS

Note: The service manual for RM-664 has been issued separately.

Television system	CCIR B, G and H	Outputs	Audio output connector (pin)
Colour system	PAL		Line output
Channel coverage	VHF channels A-H2 UHF channels 21-69		Variable 0—2 Vrms (max.) Impedance less than 1 kilohm
Programming system	30 programmes Automatic programming digital tuning		External speaker terminals (2-pin DIN) For 16 ohm speakers
Picture tube	Approx. 54.5cm (21 inches) 114-degree deflection Trinitron system (Approx. 51 cm picture measured diagonally)	Power requirements	Headphones jack (stereo phone jack)
Antenna	75-ohm standard antenna socket (BS3041/IEC169-2)	Power consumption	220—240 V ac, 50 Hz
Speakers	Two speakers Approx. 10 cm dia.	Dimensions	98Wh (Approx. 6W in standby condition)
Audio output	5W + 5W (with 10% harmonic distortion) 15W + 15W (music power)	Weight	Approx. 657 x 453 x 480 mm (w/h/d)
Input	21-pin connector in accordance with the requirements of CENELEC Standard 21-Pin connector RGB input unconnected	Accessory supplied	Approx. 26 kg RM664 Remote Commander (1)
Remote control system	infrared control	Optional accessory	OPK-113 BGS teletext adaptor. (KV-21XRD ONLY)
Power requirements	3 V dc 2 batteries IEC designation R03 (size AAA)	Design and specifications are subject to change without notice.	
Dimensions:	Approx. 67 x 18 x 174 mm (w/h/d)		
Weight	Approx. 160g (3.5 oz) incl. batteries		
Accessories supplied	IEC designation R03 battery (2)		



TRINITRON® COLOR TV


SONY®

CTV

TABLE OF CONTENTS

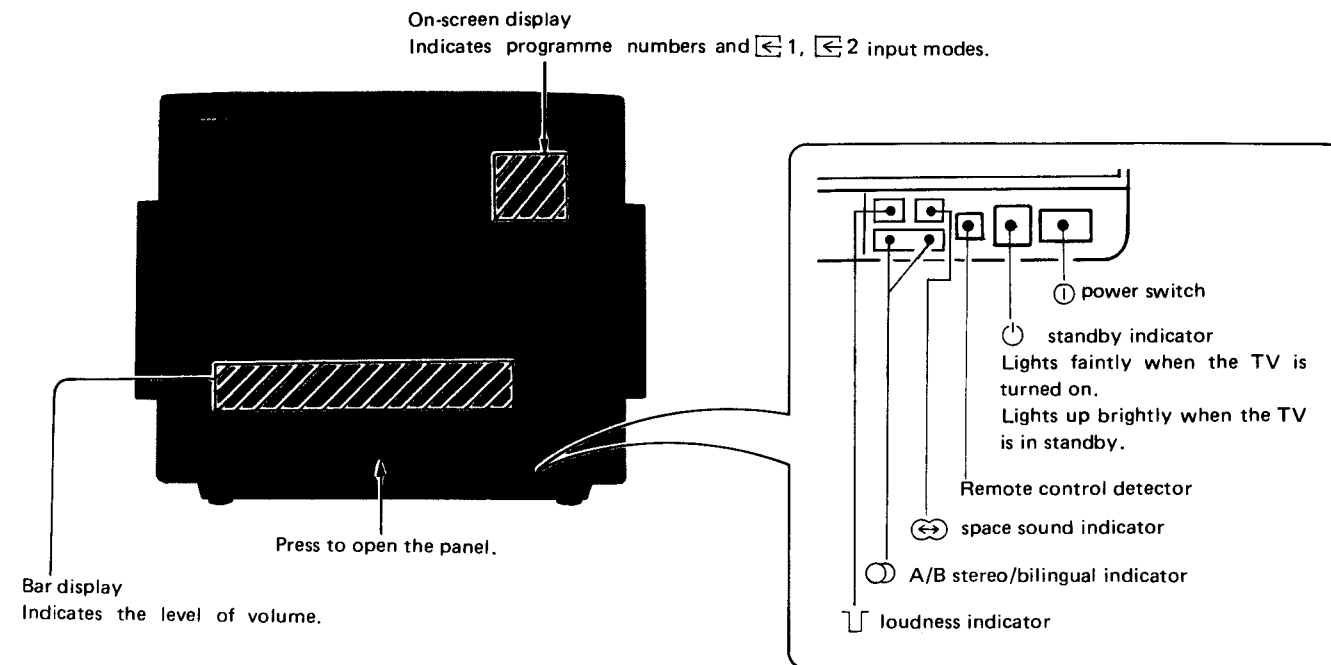
<u>Section</u>	<u>Title</u>	<u>Page</u>
1. GENERAL		
1-1.	Function of Controls	3
1-2.	Viewing teletext	5
2. SERVICE POSITION		
2-1.	Service Position	6
2-2.	OPK-113 Attaching (KV-21XRD Only) . .	7
3. DISASSEMBLY		
3-1.	Picture Tube Removal	8
4. SET-UP ADJUSTMENTS		
4-1.	Beam Landing	9
4-2.	Convergence	10
4-3.	Focus	11
4-4.	White Balance	11
5. BLOCK DIAGRAM		14
6. SEMICONDUCTORS		19
7. EXPLODED VIEWS		
7-1.	Picture Tube	20
7-2.	Rear Cover	21
7-3.	Bezel Assy	22
8. ELECTRICAL PARTS LIST		23

SAFETY-RELATED COMPONENT WARNING !!

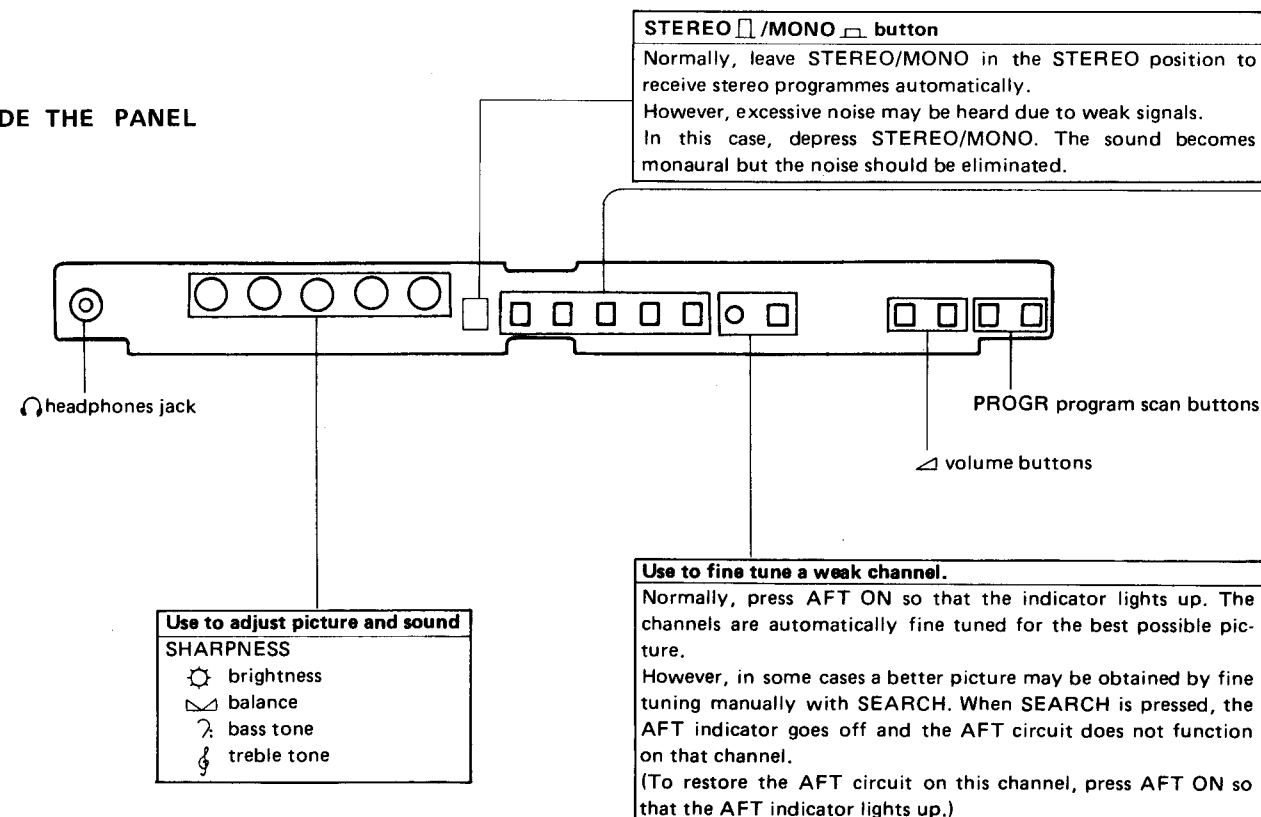
COMPONENTS IDENTIFIED BY SHADING AND MARK  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SECTION 1
GENERAL

1-1. FUNCTION OF CONTROLS



INSIDE THE PANEL



CONNECTING OTHER EQUIPMENT

Rear of the TV		Use
L/G/S	left external speaker terminal	Connect to external speakers. The TV speakers will be disconnected.
R/D/D	right external speaker terminal	
R/D/D	right audio output jack	Connect to audio equipment.
L/G/S	left audio output jack	
$\boxed{\leftarrow 1}$	21-pin connector (CENELEC standard)	Connect to a VTR, micro computer, etc. The picture of the TV channel being received is always output. The picture of $\boxed{\leftarrow 2}$ can be watched while recording a TV program with the VTR connected to $\boxed{\leftarrow 1}$
$\boxed{\leftarrow 2}$	21-pin connector (without RGB input)	Connect to a second VTR. The picture displayed on the screen is always output. The picture coming in through can be recorded on to the VTR connected to $\boxed{\leftarrow 1}$ while monitoring the picture.
Γ	antenna socket	Connect to the antenna

VTR operation using the supplied Commander

To control an 8mm VTR, set the switch inside the battery compartment to IR. Set to the unmarked position to control other VTR's.

Remote operation of the VTR is limited to the features and functions of the VTR. For further details refer to the VTR manual.

USE TO TUNE IN RECEIVABLE CHANNELS

To tune in all channels automatically:

- 1 Press PRESET.
 - 2 Press PROGR to select the program position from which tuning is to start.
 - 3 Press AUTO PROGR.
- The channels will be tuned in and memorized in consecutive positions, beginning from the program position selected in step 1.
- When tuning has been completed, the set returns to the position where tuning started.

To tune in a particular channel in any desired program position:

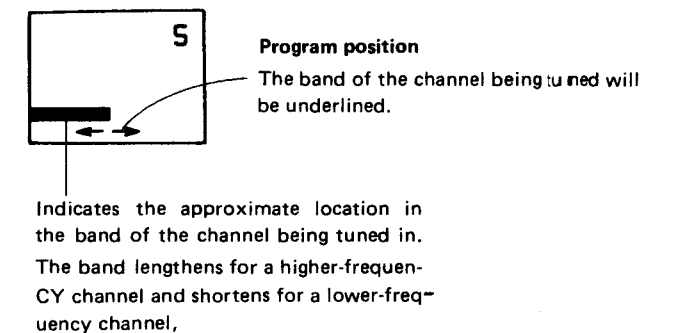
- 1 Press PRESET.
- 2 Press PROGR to select the desired position.
- 3 Press CLEAR.
- 4 Press SEARCH repeatedly until the desired channel appears.
- 5 Repeat steps 2 to 4 for all desired channels.
- 6 Press PRESET again.

To skip unused program positions:

- 1 Press PRESET.
- 2 Press PROGR to select the unused position.
- 3 Press CLEAR.
- 4 Repeat steps 2 and 3 for all unused positions.
- 5 Press PRESET again.

This program position will be skipped whenever PROGR ON the commander is pressed.

ON-SCREEN DISPLAY WHILE TUNING



1-2. VIEWING TELETEXT

The numbers and symbols on the Commander for the teletext mode are in green.

OPERATION

- 1 Select the TV channel for the desired teletext service.
- 2 Press TEXT/MIX to display the teletext service.

To return to the TV mode, press TV.




To display the index page
Press INDEX.

To display the desired teletext page
Key in the three digits for the desired page using the number buttons.


To request a higher-numbered or lower-numbered page
Press PAGE + or -.

To superimpose the teletext page on the TV picture
Press TEXT/MIX.

To hold a teletext page so that it cannot be updated
Press HOLD. To resume normal teletext reception, press TEXT/MIX.

To enlarge the teletext display
Press  /  / . Press once to enlarge the upper half of the display; press twice to enlarge the lower half of the display; press three times to return to the normal display.

To reveal the answers to a quiz
Press REVEAL.

To adjust the brightness of the teletext display
Press .

To display the teletext service of another channel

- 1 Press TV to return to the TV mode.
- 2 Select the desired TV channel.
- 3 Press TEXT/MIX.

To have a requested page broadcast at a predetermined time

- 1 Request time coded page
- 2 Press TP ON. The time display in the top right hand corner of the screen starts flashing.
- 3 Enter your request time with the number buttons, using four digits. For example, 07:30.

To cancel the request, press TP OFF.

To watch a TV program while waiting for the requested page to be displayed

- 1 Request new page.
- 2 Press TEXT CL to display the TV program. The TV channel cannot be changed.

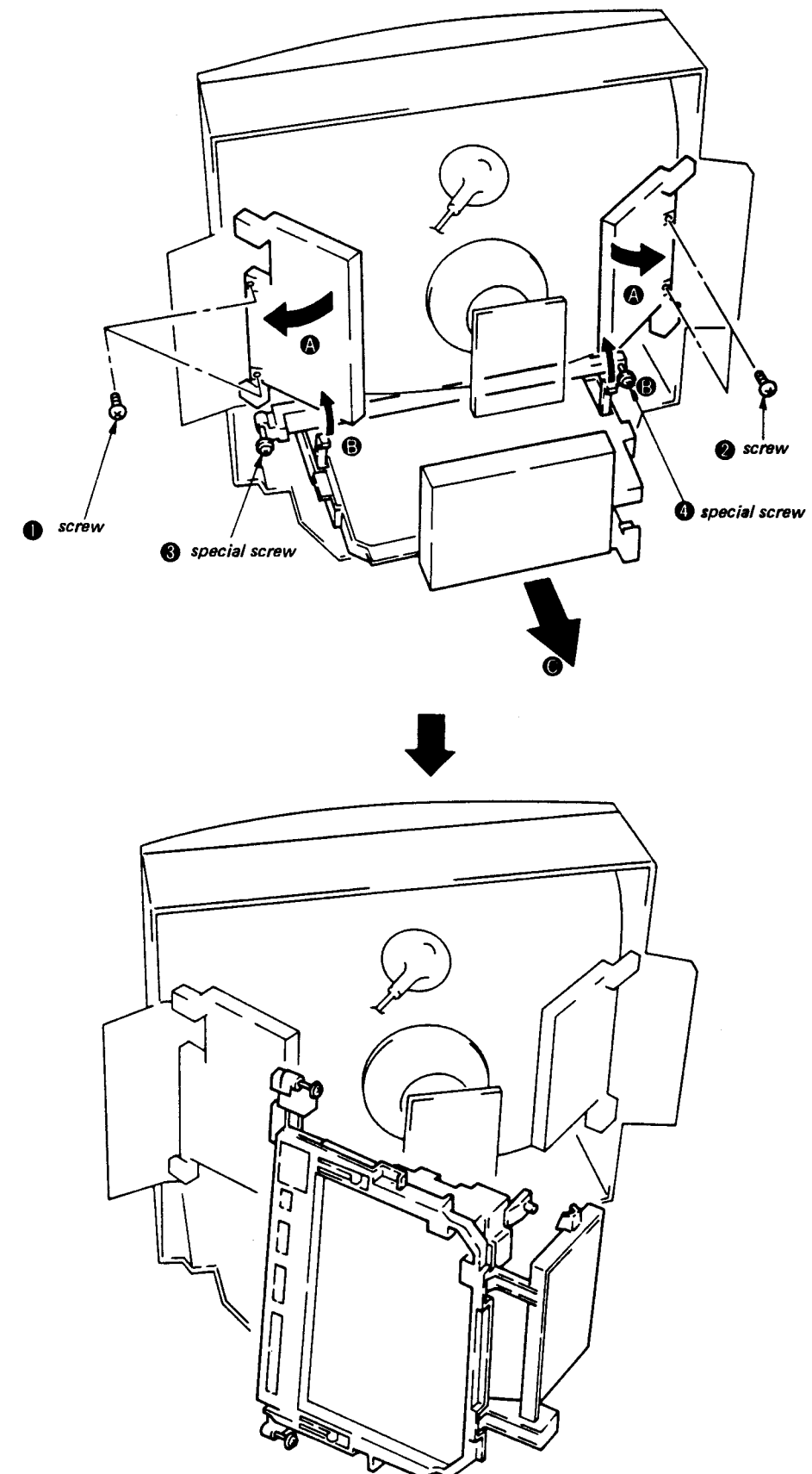
When the requested page has been captured by the adaptor, the page number is indicated in the top left corner of the screen. To display this page, press TEXT/MIX.

Notes

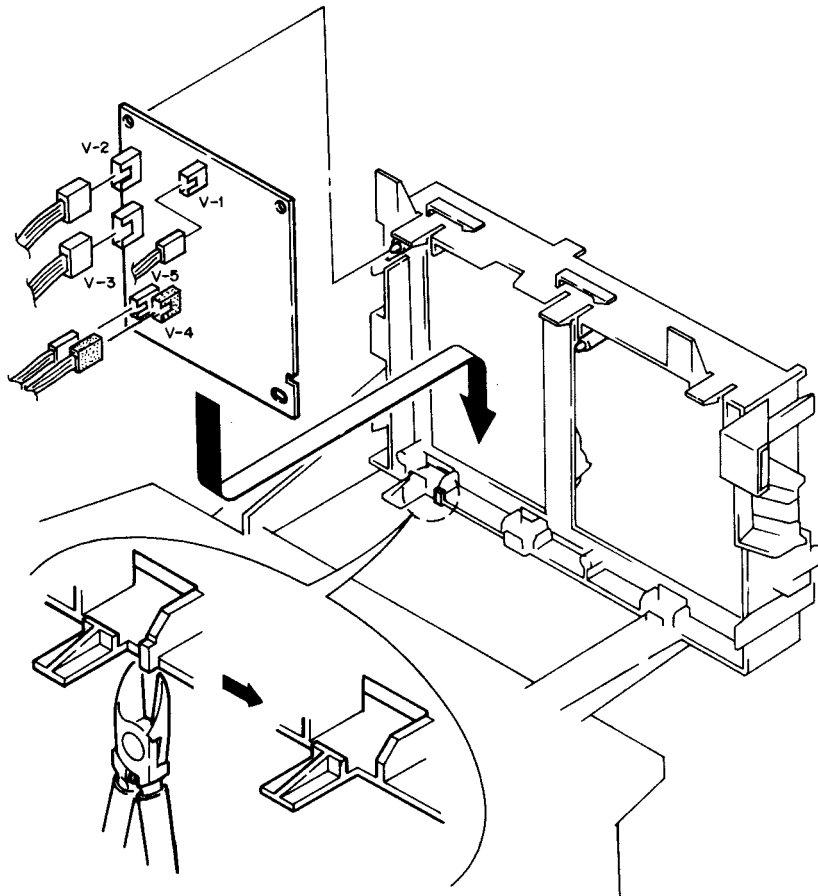
To prevent misoperation, keep AFT ON switched on in the teletext mode.

SECTION 2
SERVICE POSITION

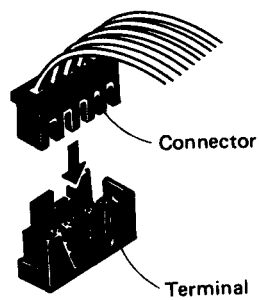
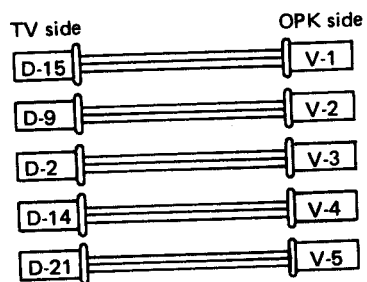
2-1. SERVICE POSITION



2-2. OPK-113 BGS ATTACHING (KV-21XRD ONLY)

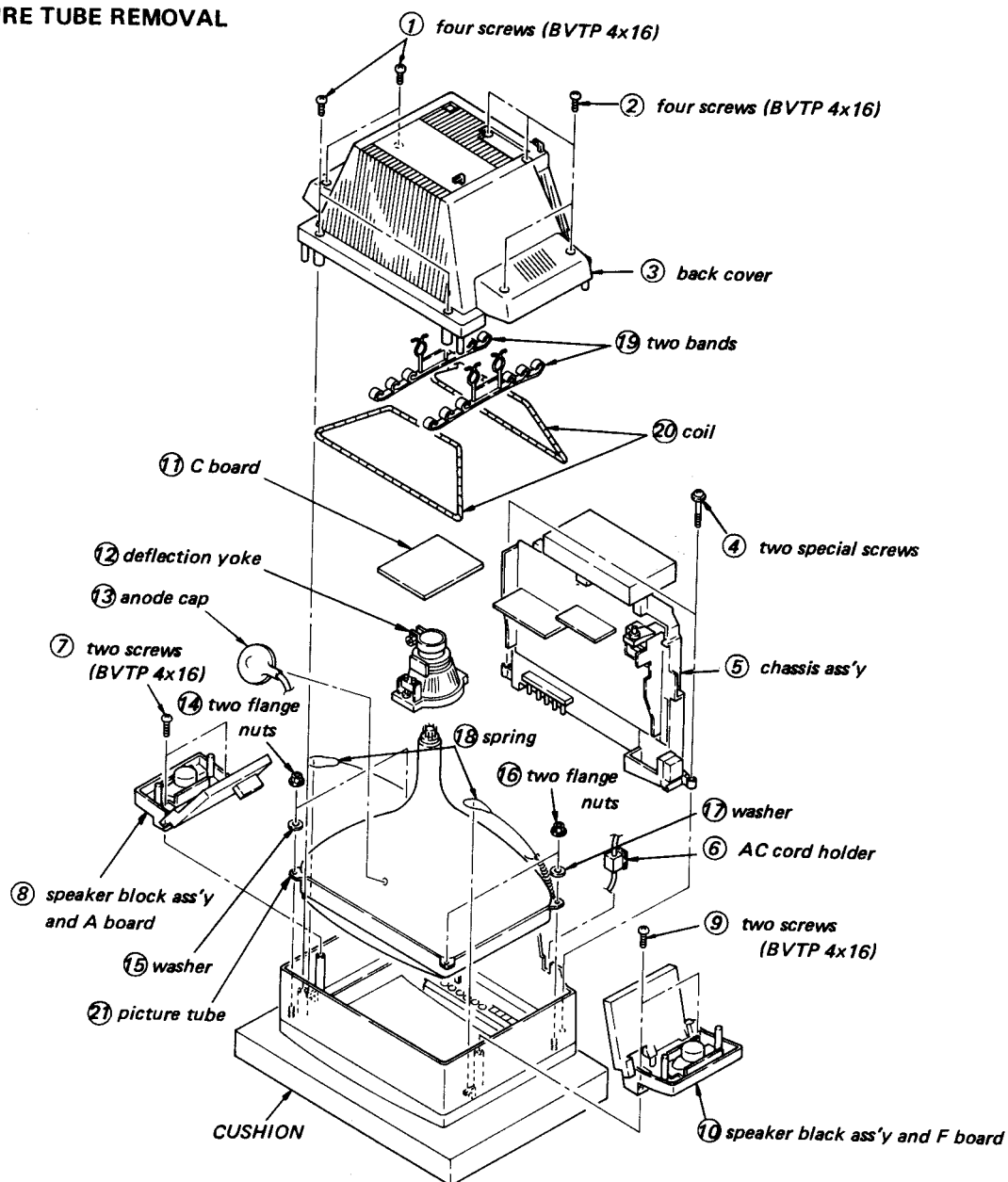


Connect to the same number terminal as the connector.

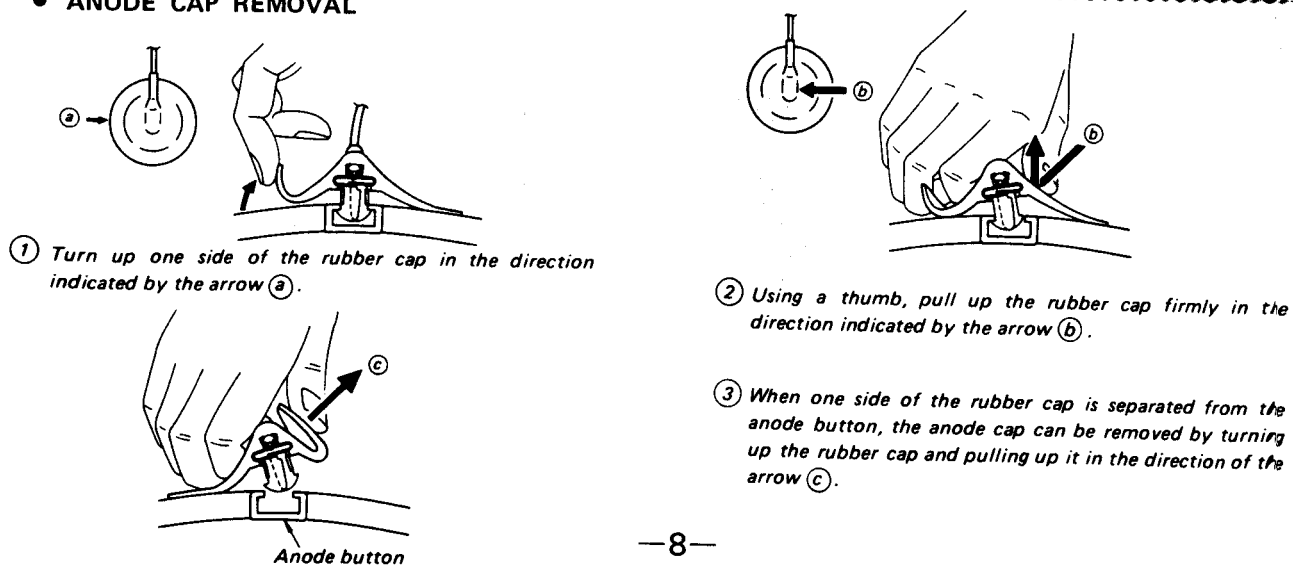


SECTION 3 DISASSEMBLY

3-1 PICTURE TUBE REMOVAL



• ANODE CAP REMOVAL



SECTION 4

SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

Controls and switch should be set as follows unless otherwise noted:

- PICTURE control80% (or Normal by Commander)
- BRIGHTNESS control50%

4-1. BEAM LANDING

- Input a raster signal with the pattern generator.
PICTURE } normal
BRT }
- Turn the raster signal of the pattern generator to red.
- Move the deflection yoke backward, and adjust with the purity control so that red is in the center and blue and green are at the sides, evenly. (Fig. 4-1, Fig. 4-2)
- Move the deflection yoke forward, and adjust so that the entire screen becomes red.
- Switch over the raster signal to blue and green and confirm the condition.
- When landing at the corners is not right, adjust by using the magnet. (Fig. 4-3)
- When the position of the deflection yoke is determined, tighten it with a deflection yoke mounting screw.

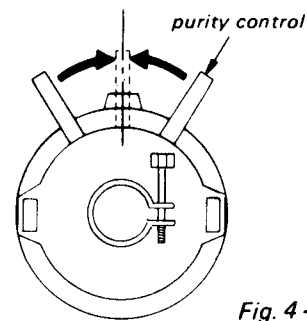


Fig. 4-1.

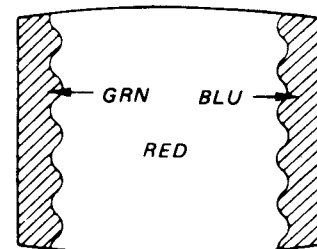
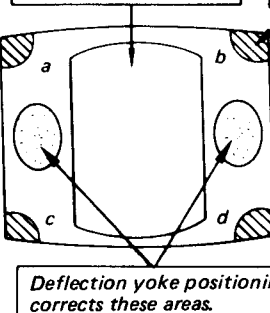


Fig. 4-2.

Disk magnets or rotatable disk magnets correct these areas (a-d).

Purity control corrects this area.



Deflection yoke positioning corrects these areas.

Fig. 4-3.

Perform the adjustments in order as follows:

- Beam Landing
- Convergence
- Focus
- White Balance

Note: Test Equipment Required.

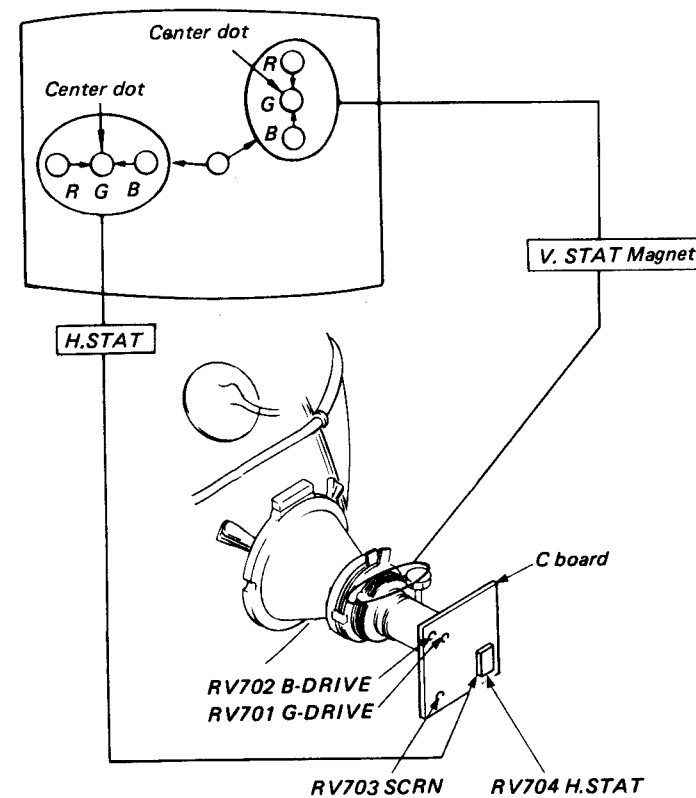
- Colour-bar/pattern Generator
- Degausser

4-2. CONVERGENCE

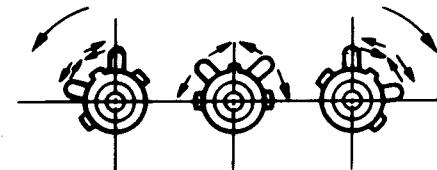
Preparation:

- Before starting, perform FOCUS, H. SIZE, V. SIZE and V. LIN adjustments.
- Set BRIGHTNESS control to fully counterclockwise.
- Feed in the dot pattern.

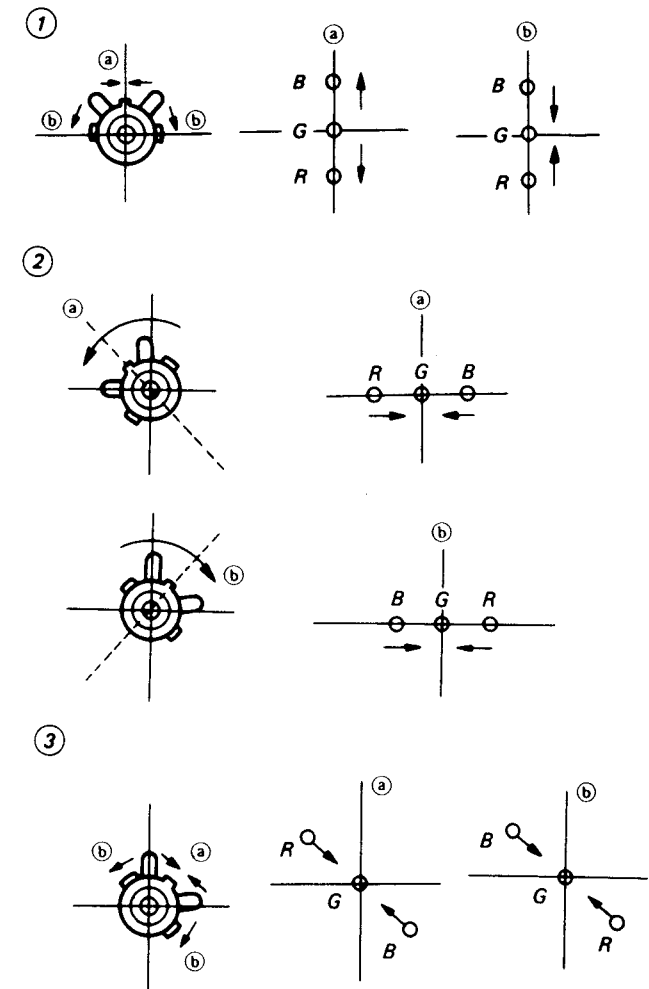
(1) Horizontal and Vertical Static Convergence



- Adjust H. STAT VR to coincide red, green and blue dots on the center of screen (Horizontal movement)
- Adjust V. STAT magnet to coincide red, green and blue dots on the center of screen (Vertical movement)
- If the red, green and blue dots do not coincide on the center of screen with H. STAT VR, perform horizontal convergence adjustment using H. STAT VR and V. STAT magnet as shown below. (In this case, H. STAT VR and V. STAT magnet effect each other.)
- Tilt the V. STAT magnet and adjust static convergence to open or close the V. STAT magnet.



- When the V. STAT magnet is moved in the direction of arrow (a) and (b), Red, Green and Blue dots move as shown below.

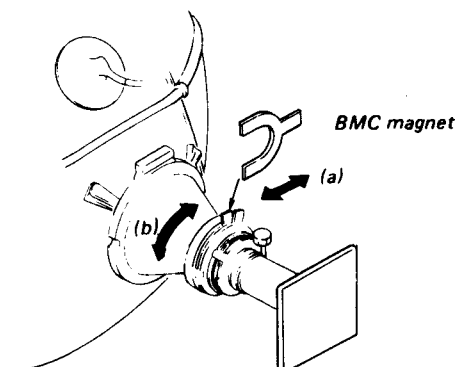


If blue dot does not coincide with red and green dots, perform following steps.

Move BMC magnet (a) to correct insufficient H. static convergence.

Rotate BMC magnet (b) to correct insufficient V. static convergence.

In either case, repeat Beam Landing Adjustment.



(2) Dynamic Convergence

- Before starting, perform FOCUS, H. SIZE, V. SIZE and V. LIN adjustments.
- Set BRIGHTNESS control to fully counterclockwise.
- Feed in the dot pattern.

- Loosen deflection yoke mounting screw.
- Remove deflection yoke mounting screw.

4-4. WHITE BALANCE

Auto Cut Off

G2 ADJ.

- Receive
- Set PIC, R, G, B
- Connect
- Adjust

W/B ADJ.

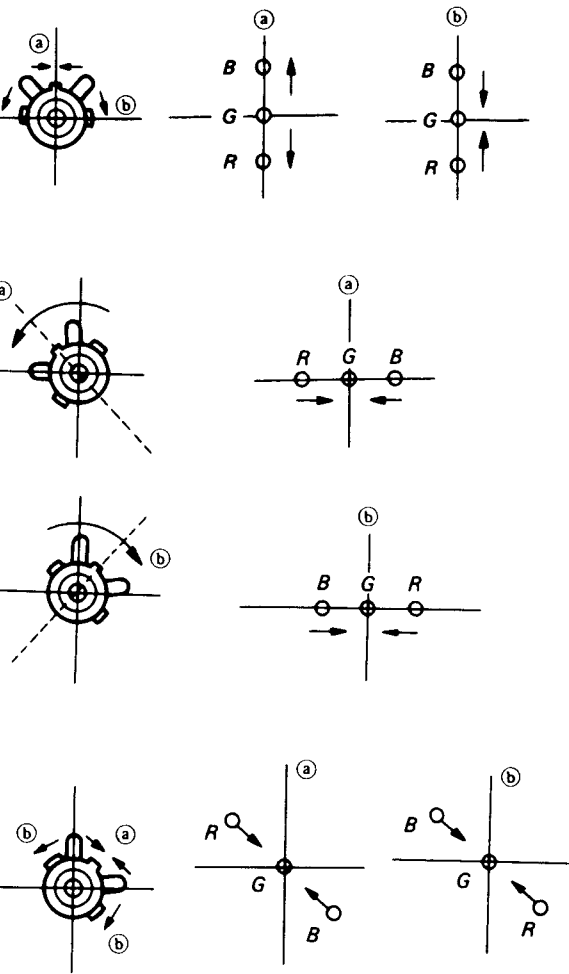
- Receive
- Set: PIC
- CO

(2) Dynamic Convergence Adjustment

Preparation:

- Before starting, perform Horizontal and Vertical Static Convergence Adjustment.
- Loosen deflection yoke screw.
- Remove deflection yoke spacers.
- Move the deflection yoke for best convergence as shown below.
- Tighten the deflection yoke screw.
- Install the deflection yoke spacers.

When the V. STAT magnet is moved in the direction of arrow (a) and (b), Red, Green and Blue dots move as shown below.

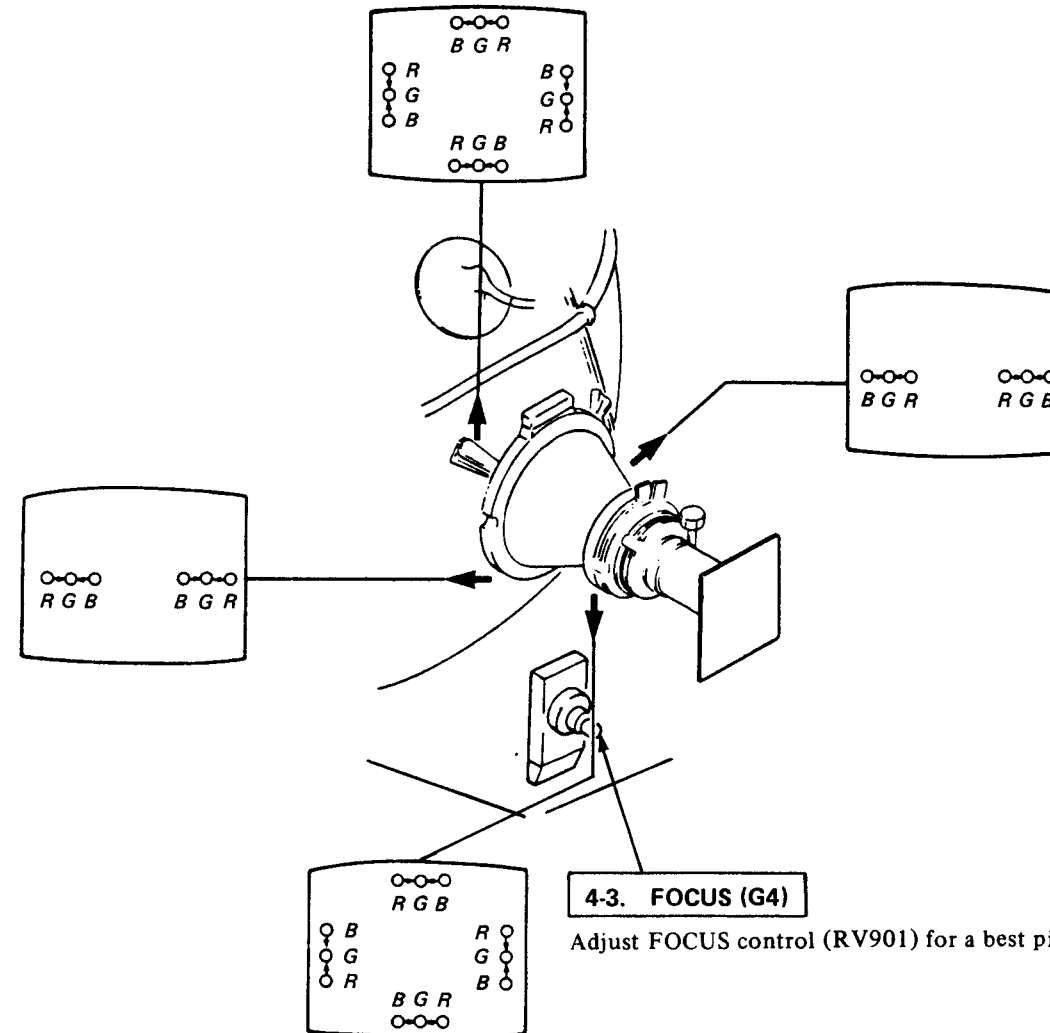
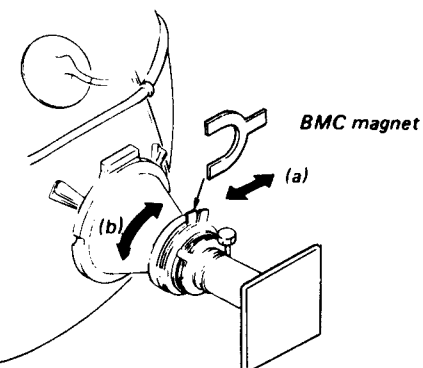


blue dot does not coincide with red and green dots, perform following steps.

Move BMC magnet (a) to correct insufficient H. static convergence.

Rotate BMC magnet (b) to correct insufficient V. static convergence.

either case, repeat Beam Landing Adjustment.



4-3. FOCUS (G4)

Adjust FOCUS control (RV901) for a best picture.

4-4. WHITE BALANCE

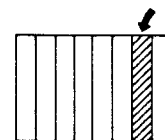
Auto Cut Off White Balance Adjustment.

G2 ADJ.

- Receive a dot signal.
- Set PIC, BRT VR's to minimum.
- Connect external power supply 170V DC to R,G,B cathode.
- Adjust G2 VR to the point where retrace glows faintly.

W/B ADJ.

- Receive color bar.
- Set: PIC, BRT: MAX
COL : MIN



- Adjust B,G DRIVE VR's to get white balance.

- Set: PIC, COL: MIN

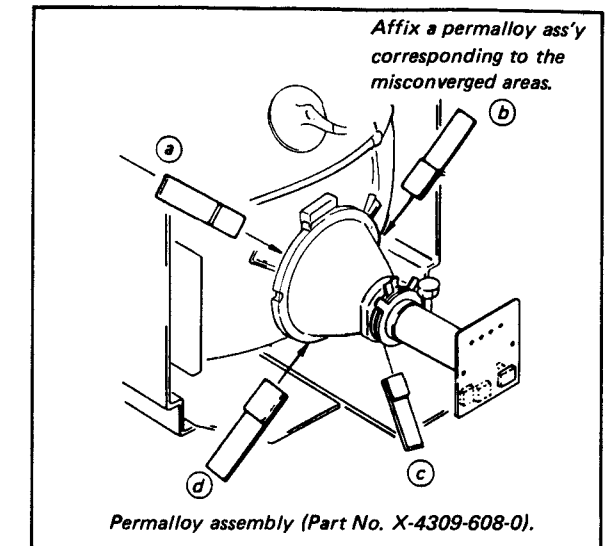
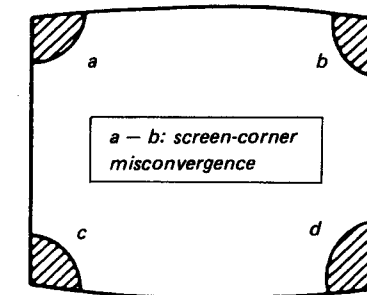
BRT : CENTER

Adjust SUB BRT. to the point where the arrow indicates.

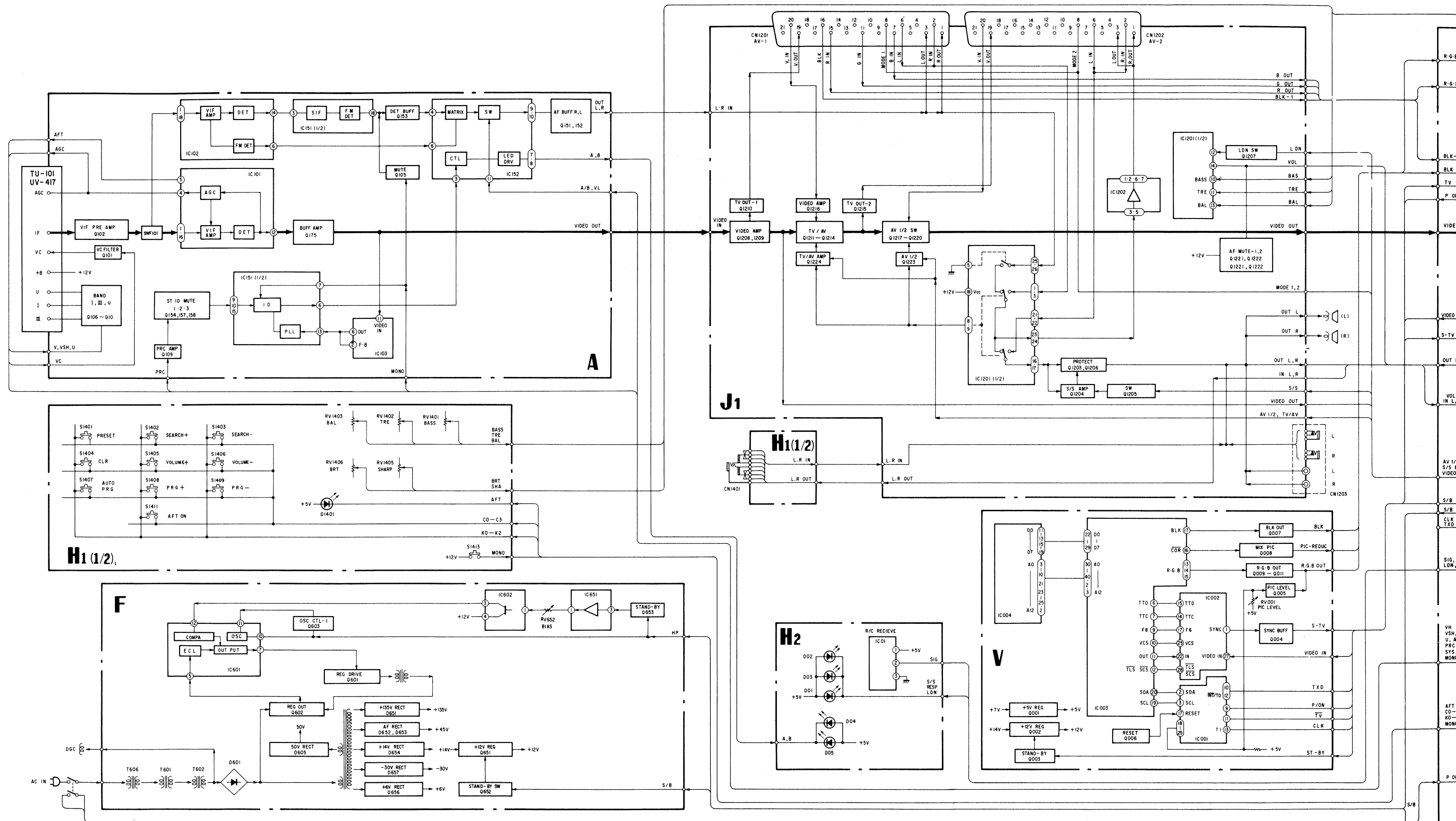
SIMPLE ADJUSTMENT METHOD

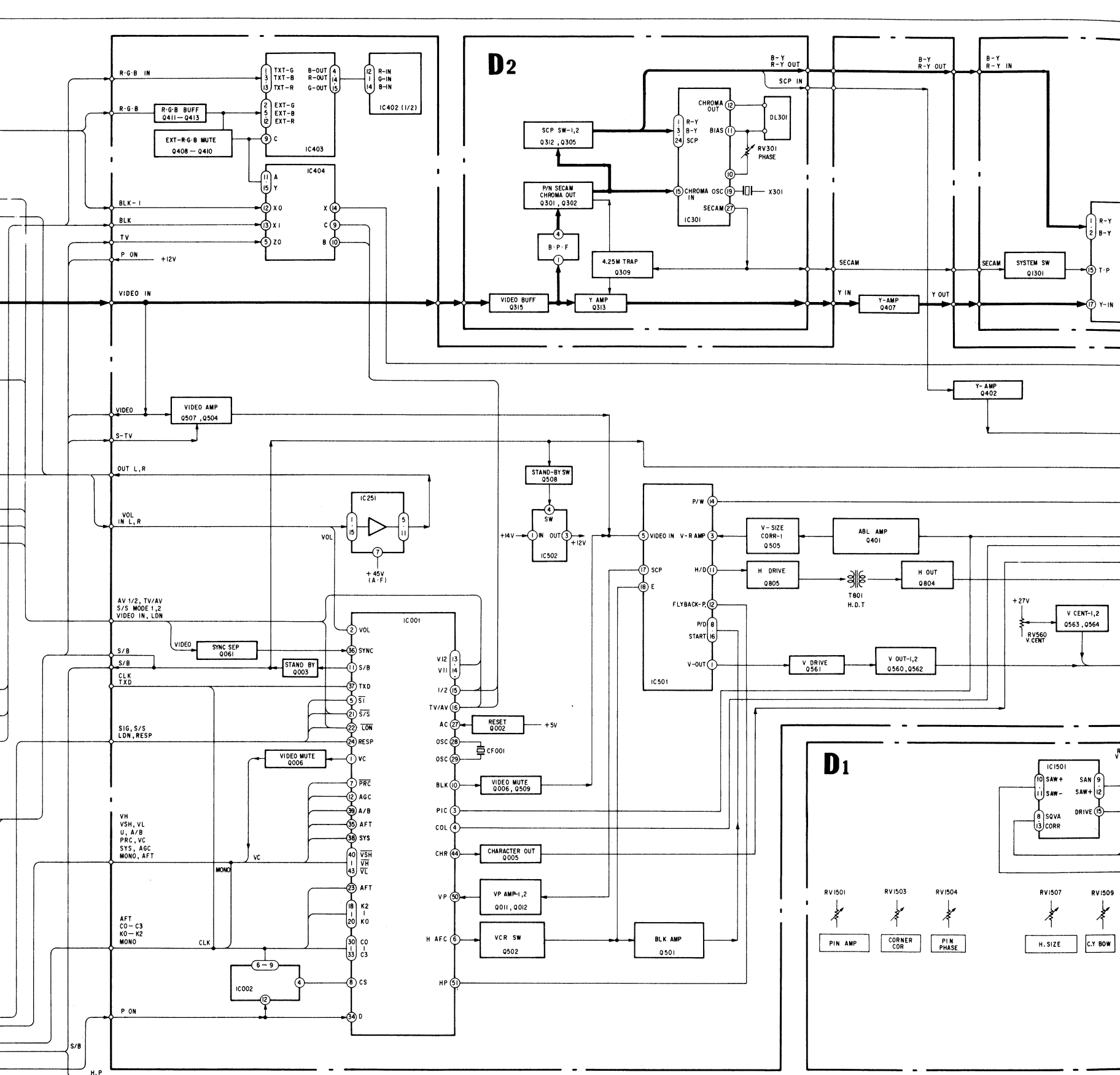
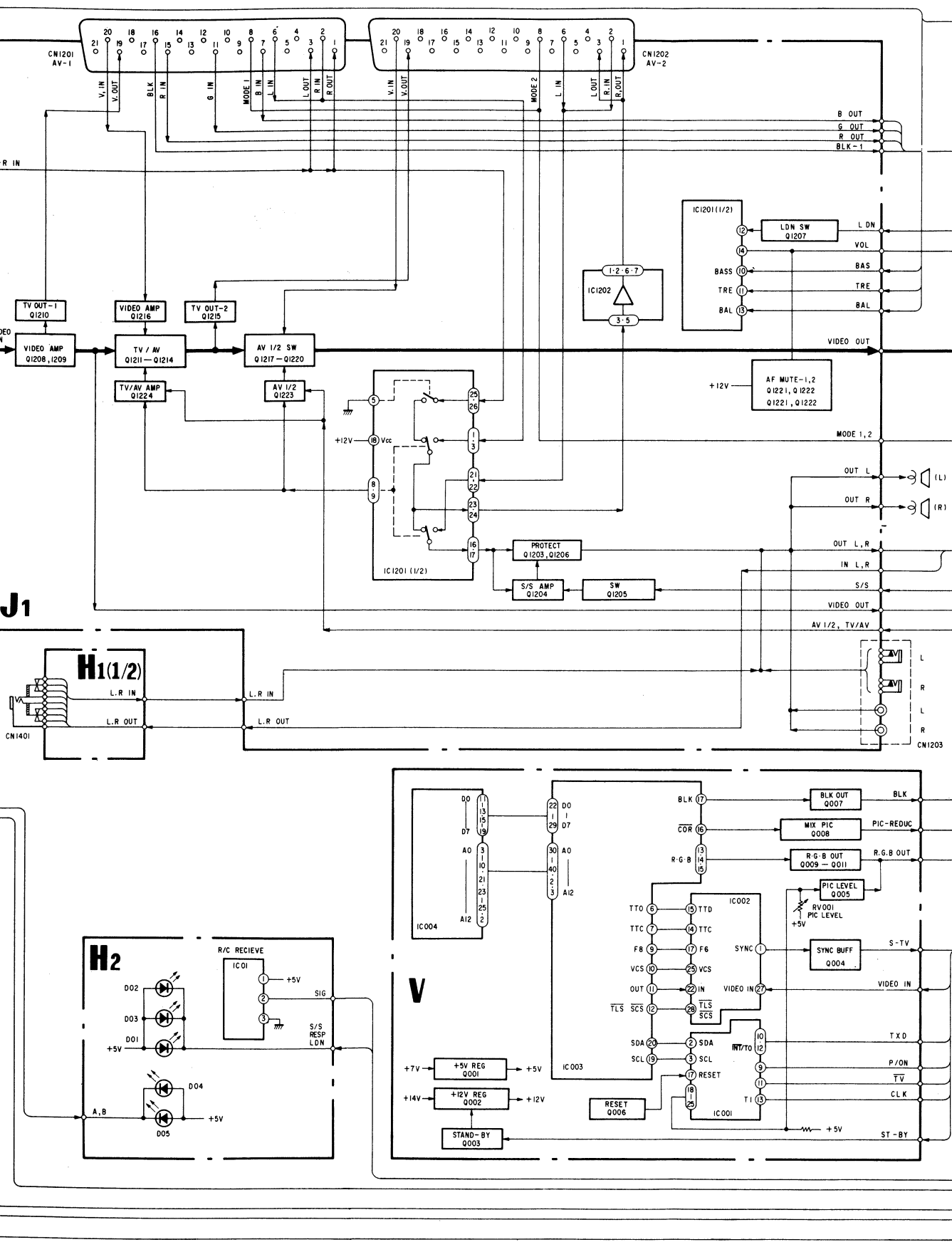
- Receive an air signal.
- Set PIC, BRT, COL to MAX.
- Set B,G DRIVE VR's to mechanical center.
- Turn G2 VR fully to the left and right and adjust to the center of the range over which color does not change.

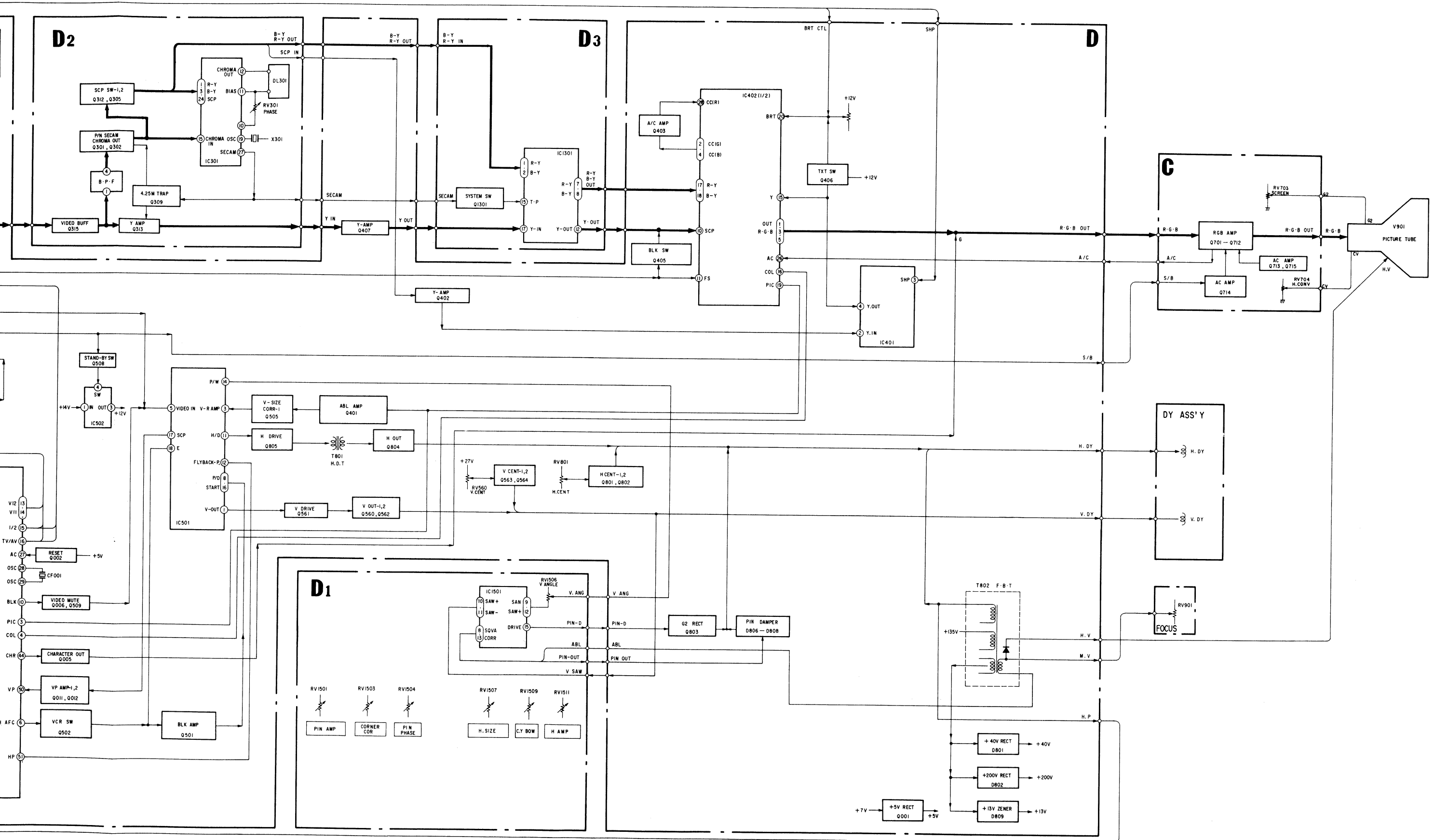
(3) Screen-corner Convergence



Permalloy assembly (Part No. X-4309-608-0).

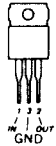




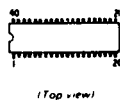


SECTION 6 SEMICONDUCTORS

AN78M12R



SAA5240A



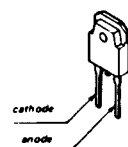
2SA1091
2SA933S
2SC1740
2SC2551
BF485-AMMO
JA101
JC501



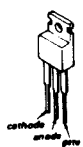
2SD1497
2SD1497-02
2SD1497-06



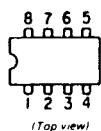
ERC26-15S
GH3F
V19E



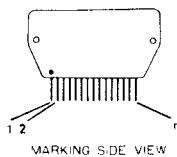
S6344G



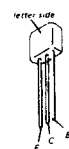
BA4558
HA17558
NJM4558D
μPC4558C



STK4362



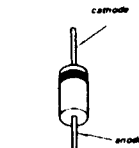
2SA1175
2SC2785



2SD795A



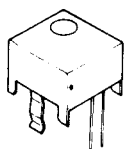
ERD29-08J



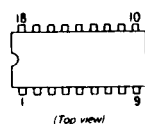
TLP581



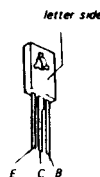
BX1387



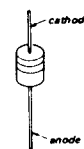
TDA2546A
TDA2579
TDA2595
TDA4560
TDA4565



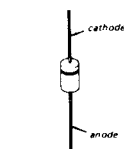
2SA1220A
2SC2611
2SC2688
2SC2690A



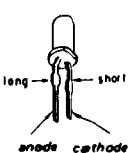
1SS119
1SS133
1SS148



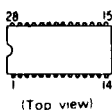
EQB01-13



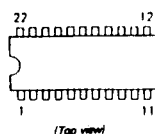
TLR124



CX20199
MAB8441P-T060
SAA5230
TC5564PL-15
TC5565PL-15
TDA3505
TDA3505-V7
TDA4555



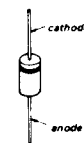
TDA4940



2SB734
2SC2958
2SC2959
2SD773
2SD774



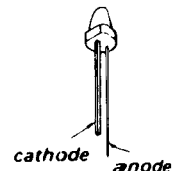
1N4148
1S1555
ERD28-06S
ES1F
HZ13EB2
HZ5.6EB2
RGP10GPKG23
RD12EB2
RD12EN2
RD13EB2
RD3.6EB2
RD3.9EN1
RD3.9EN2
RD39EB2
RD5.1EN2
RD5.6EB2
RD5.6EN1
RD5.6EN2
RD5.6EN3
RD6.2EN1
RD6.2EN2
RD6.8EN1
RD7.5EN1
RD7.5EN2
HZ3.6EB2
HZ39EB2



MC921



TLUR144



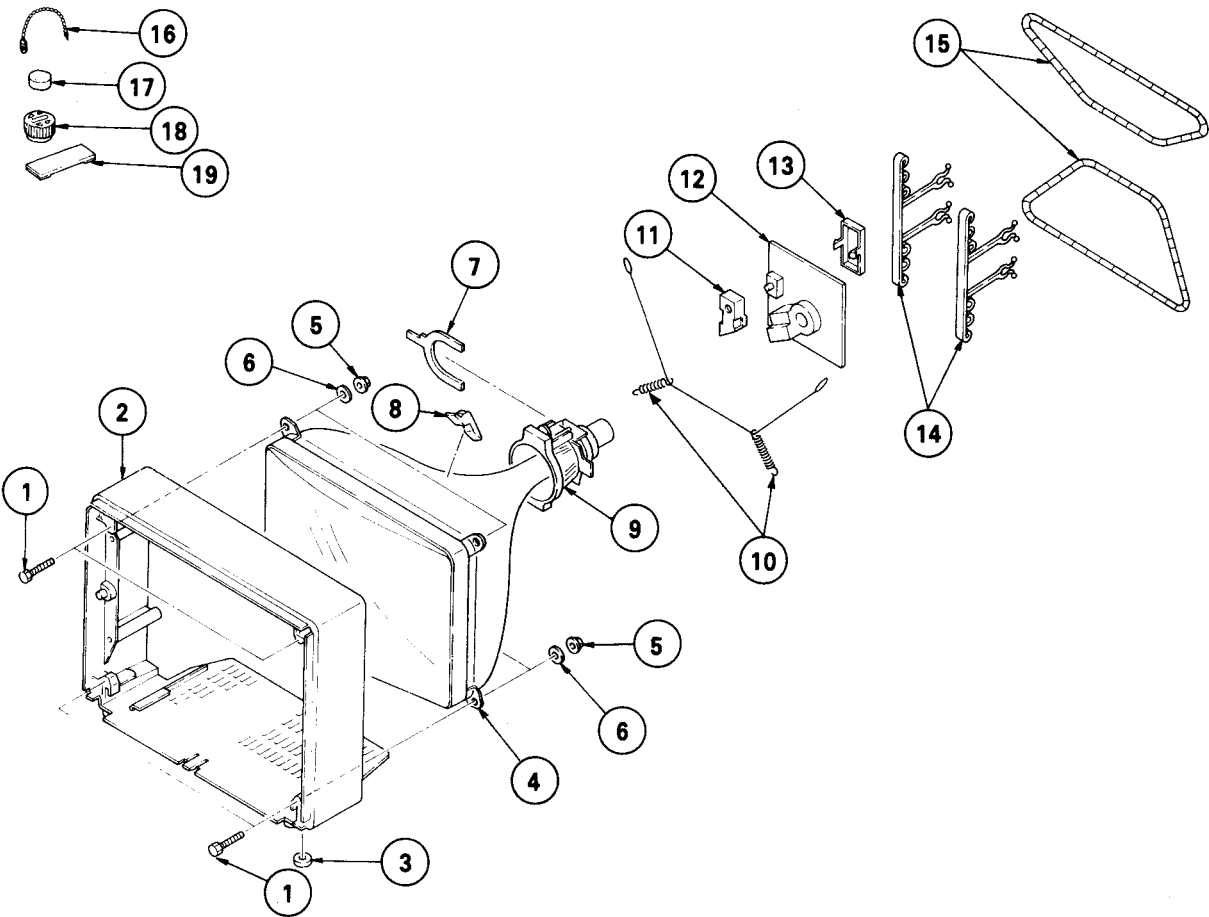
SECTION 7
EXPLODED VIEWS

NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark **A** are critical for safety. Replace only with part number specified.

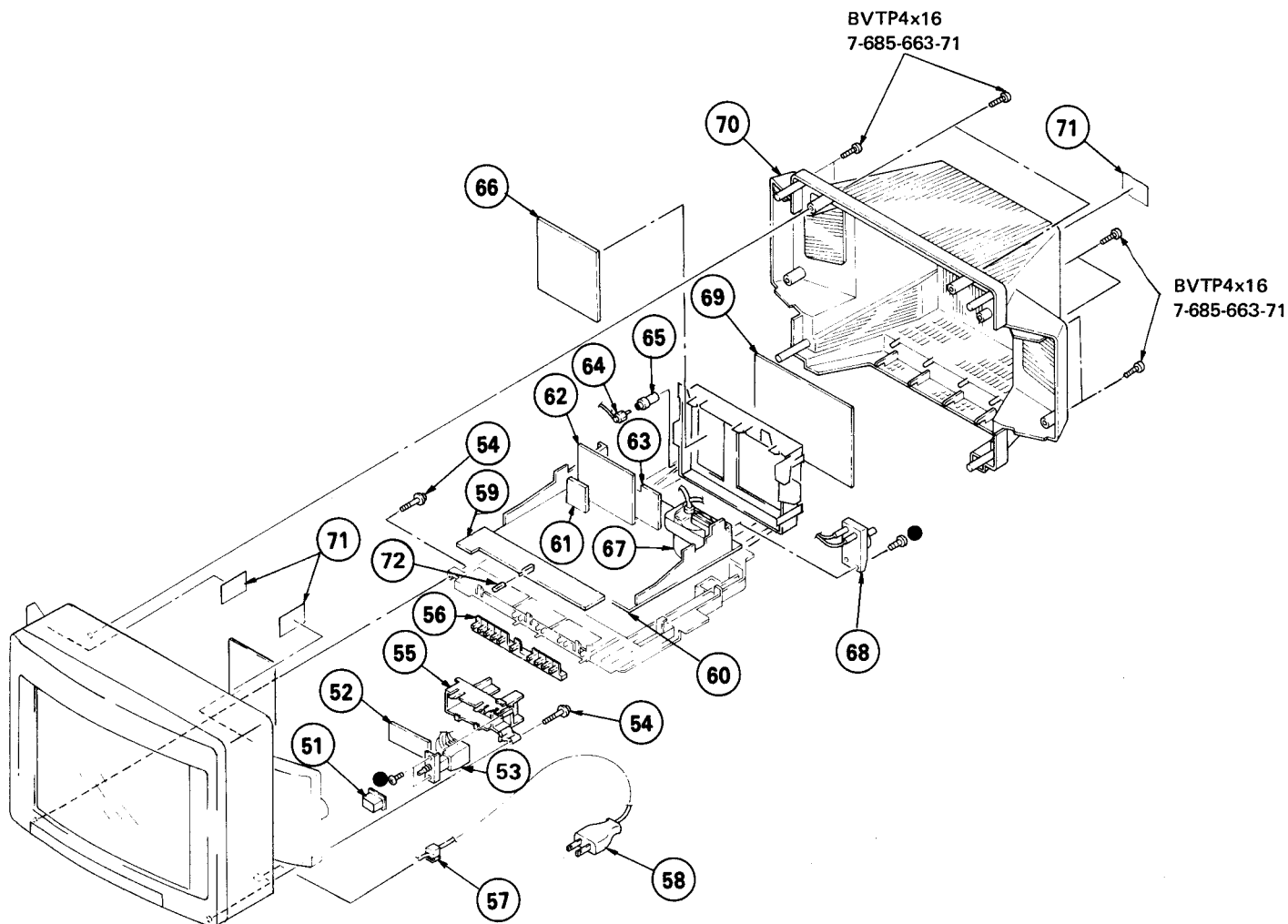
7-1. PICTURE TUBE



No.	Part No.	Description	Remark	No.	Part No.	Description	Remark
1	3-703-025-12	BOLT M5, HEXAGON-HEAD		10	4-369-318-00	SPRING, TENSION	
2	4-380-631-01	CABINET (FOR GRAY)		11	*4-379-167-01	COVER (MAIN), CV	
	4-380-631-11	CABINET (FOR IVORY)		12	*A-1330-686-A	C BOARD, COMPLETE	
3	4-809-913-XX	FOOT, F		13	*4-379-160-01	COVER (REAR LID), CV	
4	A 8-736-954-05	CRT (A51JK060X)		14	*4-380-620-01	BAND, DEGAUSS COIL	
5	4-306-034-00	FLANGE NUT, (B) 5MM		15	A 1-426-280-11	COIL, DEMAGNETIZATION	
6	4-373-615-02	WASHER, CRT POSITIONING		16	4-308-870-00	CLIP, LEAD WIRE	
7	1-452-277-00	MAGNET, BMC		17	1-452-032-00	MAGNET, DISK; 10MM ϕ	
8	3-703-003-00	SPACER, DY		18	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM ϕ	
9	A 1-451-290-11	DEFLECTION YOKE (SY-153F)		19	X-4309-608-0	PERMALLOY ASSY, CONVERGENCE	

7-2. REAR COVER

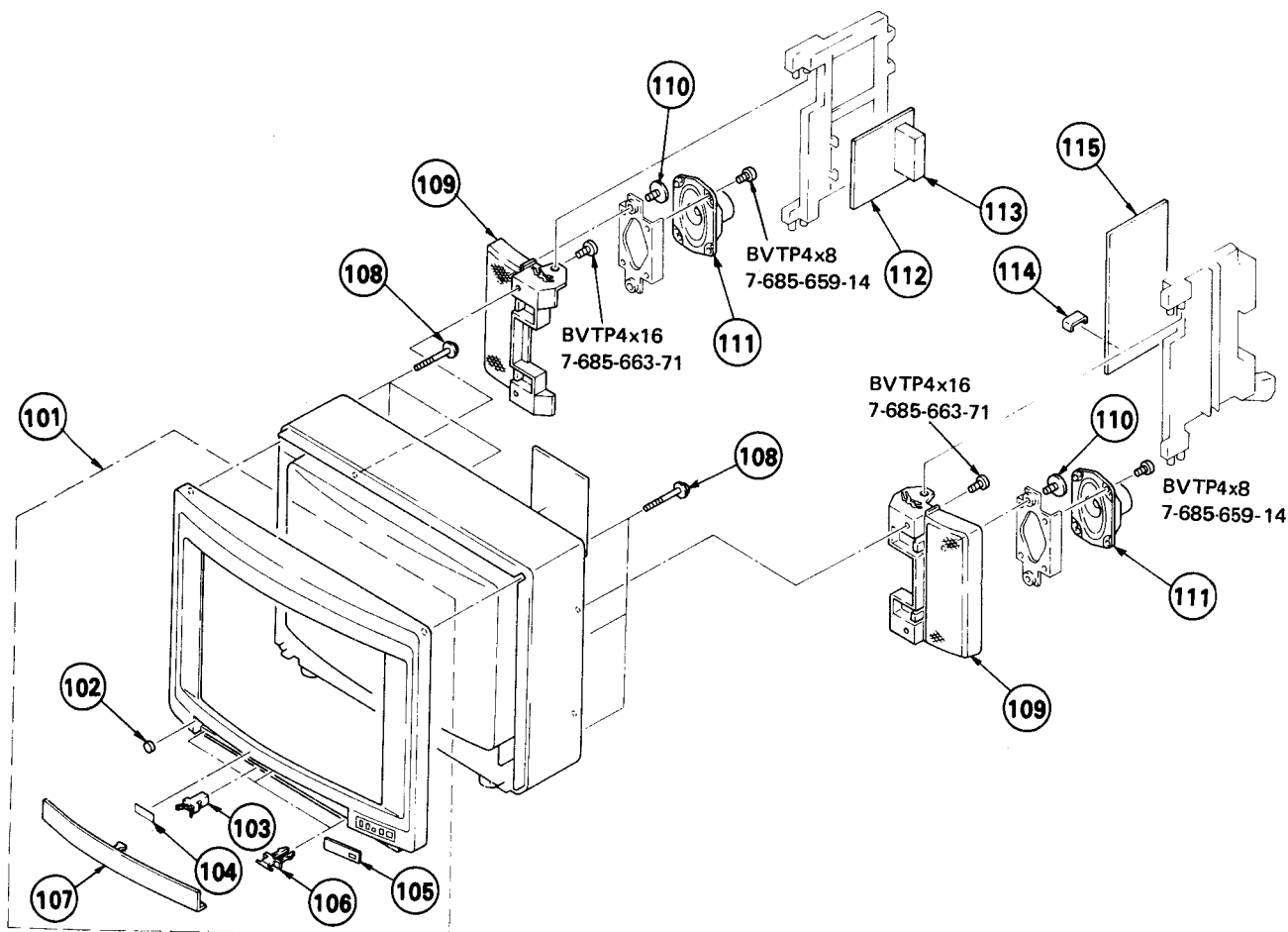
●: BVTP3x12 7-685-648-71



No.	Part No.	Description	Remark	No.	Part No.	Description	Remark
51	4-380-624-01	BUTTON, POWER		63	*1-617-753-11	D1 BOARD	
52	*1-617-746-11	H2 BOARD		64	*1-558-539-11	CABLE, P-P	
53	▲1-554-762-21	SWITCH, PUSH (AC POWER)(1 KEY)		65	▲1-563-204-11	SOCKET, ANTENNA (PAL/SECAM)	
54	4-319-520-00	SCREW, SPECIAL (+PW4X30)		66	*A-1325-023-A	V BOARD, COMPLETE (KV-21XRTD ONLY)	
55	*4-380-623-01	BRACKET, POWER SWITCH		67	▲1-439-387-21	TRANSFORMER ASSY, FLYBACK	
56	4-380-644-01	BUTTON (COMPLETE), MULTI		68	▲1-237-286-11	RESISTOR ASSY, HIGH-VOLTAGE	
57	▲4-022-115-01	HOLDER, AC CORD		69	*A-1371-170-A	J1 BOARD, COMPLETE	
58	▲1-551-270-31	CORD, POWER		70	4-380-636-01	COVER, REAR	
59	*1-617-747-11	H1 BOARD		71	*4-380-684-01	LABEL (B), COMBINATION (KV-21XRTD)	
60	*A-1345-602-A	D BOARD, COMPLETE			*4-382-041-01	LABEL (B), COMBINATION (KV-21XRD)	
61	*1-618-128-11	D3 BOARD		72	4-376-524-01	BUTTON, STEREO/MONO	
62	*A-1345-612-A	D2 BOARD, COMPLETE					


The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.

7-3. BEZEL ASSY



No.	Part No.	Description
101	X-4374-151-1	BEZEL ASSY (KV-21XRD)
	X-4374-151-2	BEZEL ASSY (KV-21XRTD)
102	*4-314-871-00	CUSHION
103	4-374-714-01	CATCH, PUSH
104	*4-374-115-01	EMBLEM, SONY
105	*4-380-653-01	WINDOW, ORNAMENTAL
106	3-662-365-00	SHAFT (S), DOOR
107	4-380-626-01	DOOR (KV-21XRD)
	4-380-626-11	DOOR (KV-21XRTD)

Remark	No.	Part No.	Description	Remark
102-107	108	4-319-520-00	SCREW, SPECIAL (+PW4X30)	
102-107	109	X-4380-602-1	PANEL ASSY, SPEAKER	
	110	4-314-843-00	SCREW, TAPPING, +4X12	
	111	1-503-642-11	SPEAKER	
	112	*A-1296-140-A	A BOARD, COMPLETE	
	113	A-1-463-523-11	TUNER, ET (UHF/VHF) (UV417)	
	114	*4-375-709-01	COVER, FUSE	
	115	*A-1245-330-A	F BOARD, COMPLETE	

The components identified by shading and mark  are critical for safety. Replace only with part number specified.

SECTION 8
ELECTRICAL PARTS LIST

F

NOTE:

The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

• Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

When indicating parts by reference number, please include the board name.

• All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

CAPACITORS
• MF : μ F, PF : μ F

RESISTORS
• All resistors are in ohms
• F : nonflammable

COILS
MMH . mH, UH : μ H

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
	*A-1245-330-A	F BOARD, COMPLETE *****		C669	1-102-038-00	CERAMIC 0.001MF	500V
				C670	1-101-004-00	CERAMIC 0.01MF	50V
		<u>CAPACITOR</u>				<u>DIODE</u>	
C601	Δ 1-117-121-51	PAPER 0.22MF 20% 250V		D601	Δ 8-719-503-06	DIODE S3WB60Z	
C602	Δ 1-117-121-51	PAPER 0.22MF 20% 250V		D602	8-719-100-65	DIODE RD12E-B2	
C603	1-162-578-00	CERAMIC 0.0047MF 20% 400V		D603	8-719-815-55	DIODE 1S1555	
C604	1-162-578-00	CERAMIC 0.0047MF 20% 400V		D604	8-759-157-40	IC UPC574J	
C605	Δ 1-162-578-51	CERAMIC 0.0047MF 20% 400V		D605	8-719-901-93	DIODE V19E	
C606	Δ 1-162-578-51	CERAMIC 0.0047MF 20% 400V		D606	8-719-815-55	DIODE 1S1555	
C607	Δ 1-161-964-61	CERAMIC 0.0047MF 250V		D607	8-719-815-55	DIODE 1S1555	
C608	Δ 1-161-964-61	CERAMIC 0.0047MF 250V		D608	8-719-815-55	DIODE 1S1555	
C609	Δ 1-161-964-61	CERAMIC 0.0047MF 250V		D609	8-719-305-15	DIODE GH3F	
C610	1-125-318-00	ELECT(BLOCK) 220MF 20% 400V		D651	8-719-928-08	DIODE ERD28-08S	
C611	1-110-175-81	MYLAR 0.1MF 10% 100V		D652	8-719-901-93	DIODE V19E	
C612	1-106-180-00	MYLAR 0.0022MF 5% 50V		D653	8-719-901-93	DIODE V19E	
C613	1-123-356-00	ELECT 10MF 20% 16V		D654	8-719-300-59	DIODE CTU-12S	
C614	1-123-356-00	ELECT 10MF 20% 16V		D655	8-719-000-12	DIODE MC931	
C615	1-102-106-00	CERAMIC 100PF 10% 50V		D656	8-719-300-59	DIODE CTU-12S	
C616	1-123-369-00	ELECT 4.7MF 20% 25V		D657	8-719-901-93	DIODE V19E	
C617	1-110-186-81	MYLAR 0.0047MF 10% 400V		D658	8-719-102-74	DIODE RD6.2E-N2	
C618	1-102-030-00	CERAMIC 330PF 10% 500V		D659	8-719-102-70	DIODE RD5.6E-N1	
C619	1-110-182-81	MYLAR 0.022MF 10% 250V		D660	8-719-815-55	DIODE 1S1555	
C620	1-123-332-00	ELECT 47MF 20% 16V		D661	8-719-815-55	DIODE 1S1555	
C621	1-136-065-00	FILM 0.0027MF 3% 2KV		D662	8-719-901-93	DIODE V19E	
C622	1-123-385-00	ELECT 22MF 20% 100V		D663	8-719-102-74	DIODE RD6.2E-N2	
C623	1-161-973-00	CERAMIC 220PF 10% 400V		D664	8-719-100-65	DIODE RD12E-B2	
C624	1-161-973-00	CERAMIC 220PF 10% 400V				<u>CONNECTOR</u>	
C625	1-123-380-00	ELECT 1MF 20% 50V		F1	*1-506-348-XX	3P PLUG (L)	
C627	1-123-380-00	ELECT 1MF 20% 50V		F2	*1-508-765-00	3P PLUG (M)	
C628	1-106-180-00	MYLAR 0.0022MF 5% 50V		F3	*1-508-786-00	2P PLUG (M)	
C632	1-102-038-00	CERAMIC 0.001MF 500V		F4	*1-508-765-00	3P PLUG (M)	
C633	Δ 1-117-121-51	PAPER 0.22MF 20% 250V		F6	*1-564-880-31	PLUG, CONNECTOR 3P	
C634	1-110-175-81	MYLAR 0.1MF 10% 100V		F7	*1-564-883-11	PLUG, CONNECTOR 6P	
C635	Δ 1-117-121-51	PAPER 0.22MF 20% 250V				<u>FUSE</u>	
C651	1-162-115-00	CERAMIC 330PF 10% 2KV		F601	Δ 1-532-350-11	FUSE, TIME-LAG 4A/250V	
C652	1-124-347-00	ELECT 100MF 20% 160V			1-533-149-00	HOLDER, FUSE; F601	
C653	1-123-364-00	ELECT 1000MF 20% 50V				<u>IC</u>	
C654	1-123-606-00	ELECT 1000MF 20% 25V		IC601	8-759-100-75	IC UPC1394C	
C655	1-123-606-00	ELECT 1000MF 20% 25V		IC602	Δ 8-719-800-82	DIODE TLP581	
C656	1-102-038-00	CERAMIC 0.001MF 500V		IC651	8-759-145-58	IC UPC4558C	
C657	1-123-380-00	ELECT 1MF 20% 50V				<u>COIL</u>	
C658	1-123-332-00	ELECT 47MF 20% 16V		L601	1-407-365-00	COIL, CHOKE	
C659	1-102-074-00	CERAMIC 0.001MF 10% 50V		L651	1-425-613-00	COIL, AIR-CORE, QF TYPE	
C660	1-123-875-91	ELECT 10MF 20% 50V		L652	1-459-585-11	COIL (WITH CORE) (DRUM TYPE)	
C661	1-123-973-00	ELECT 100MF 20% 16V		L653	1-425-613-00	COIL, AIR-CORE, QF TYPE	
C662	1-110-190-81	MYLAR 0.01MF 10% 400V		L654	1-425-613-00	COIL, AIR-CORE, QF TYPE	
C663	1-123-380-00	ELECT 1MF 20% 50V					
C664	1-124-038-00	ELECT 1MF 20% 50V					
C665	1-123-380-00	ELECT 1MF 20% 50V					
C666	1-123-307-00	ELECT 100MF 20% 6.3V					
C667	1-102-121-00	CERAMIC 0.0022MF 10% 50V					
C668	1-110-190-81	MYLAR 0.01MF 10% 400V					



Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
TRANSISTOR				R657	1-215-698-91	METAL 22 5% 1/6W	
Q601	8-729-195-82	TRANSISTOR 2SC2958		R659	1-215-865-11	METAL OXIDE 220 5% 1W	F
Q602	8-729-301-00	TRANSISTOR 2SD1497-02		R660	1-216-370-11	METAL OXIDE 1.2 5% 2W	F
	4-365-216-00	SPACER, MICA; Q602		R662	1-215-776-91	METAL 39K 5% 1/6W	
	*4-368-683-01	SPRING; Q602		R663	1-215-764-91	METAL 12K 5% 1/6W	
Q603	8-729-178-54	TRANSISTOR 2SC2785		R664	1-215-200-00	METAL 100K 5% 1/4W	
Q651	8-729-109-53	TRANSISTOR 2SD795A		R665	1-215-754-91	METAL 4.7K 5% 1/6W	
Q652	8-729-178-54	TRANSISTOR 2SC2785		R666	1-215-144-00	METAL 470 5% 1/4W	
Q653	8-729-178-54	TRANSISTOR 2SC2785		R667	1-215-126-81	METAL 82 5% 1/4W	
				R668	1-215-778-91	METAL 47K 5% 1/6W	
RESISTOR				R669	1-215-752-91	METAL 3.9K 5% 1/6W	
R601	1-217-328-11	WIREWOUND 2.7 10% 7W	F	R670	1-215-746-91	METAL 2.2K 5% 1/6W	
R602	1-244-945-91	CARBON 1M 5% 1/2W		VARIABLE RESISTOR			
R603	1-205-758-11	CEMENTED 100 10% 10W	F	RV651	1-230-627-11	RES, ADJ, CARBON 1K	
R604	1-247-289-11	CARBON 8.2M 5% 1W		RV652	1-226-720-00	RES, ADJ, METAL GLAZE 2.2K	
R605	1-215-798-91	METAL 330K 5% 1/6W		TRANSFORMER			
R606	1-215-770-91	METAL 22K 5% 1/6W		T601	1-421-776-11	LFT	
R608	1-215-746-91	METAL 2.2K 5% 1/6W		T602	1-421-592-11	TRANSFORMER, FERRITE	
R609	1-215-871-11	METAL OXIDE 2.2K 5% 1W	F	T603	1-437-079-00	TRANSFORMER, HORIZONTAL DRIVE	
R611	1-215-774-91	METAL 33K 5% 1/6W		T605	1-421-733-21	SRT	
R612	1-215-904-51	METAL OXIDE 100K 5% 2W	F	T606	1-421-866-11	LFT	
R613	1-215-872-11	METAL OXIDE 3.3K 5% 1W	F	THERMISTOR			
R614	1-216-459-00	METAL OXIDE 2.7K 5% 2W	F	TH601	1-800-944-11	THERMISTOR TH-4700	
R615	1-205-793-00	CEMENTED 30K 10% 10W		TH651	1-800-944-11	THERMISTOR TH-4700	
R616	1-215-772-91	METAL 27K 5% 1/6W		THP601	1-806-387-11	THERMISTOR (POSITIVE)	
R621	1-215-762-91	METAL 10K 5% 1/6W		THP602	1-806-387-11	THERMISTOR (POSITIVE)	
R622	1-215-770-91	METAL 22K 5% 1/6W		*****			
R623	1-215-162-00	METAL 2.7K 5% 1/4W		*A-1296-140-A	A BOARD, COMPLETE		
R624	1-215-754-91	METAL 4.7K 5% 1/6W			*****		
R625	1-215-786-91	METAL 100K 5% 1/6W		*4-368-692-03	CASE (MAIN), SHIELD		
R626	1-215-150-00	METAL 820 5% 1/4W		*4-368-693-02	CASE (UPPER LID), SHIELD		
R627	1-215-722-91	METAL 220 5% 1/6W		*4-368-694-02	CASE (BOTTOM LID), SHIELD		
R628	1-215-796-91	METAL 270K 5% 1/6W		CONNECTOR			
R629	1-215-758-91	METAL 6.8K 5% 1/6W		A1	*1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)	
R630	1-215-112-00	METAL 22 5% 1/4W		A2	*1-564-883-11	PLUG, CONNECTOR 6P	
R631	1-205-728-00	CEMENTED 47 10% 7W		A3	*1-564-890-11	PLUG, CONNECTOR 13P	
R632	1-217-192-00	WIREWOUND 0.22 10% 2W	F	CAPACITOR			
R633	1-215-794-91	METAL 220K 5% 1/6W		C101	1-110-175-81	MYLAR 0.1MF 10% 100V	
R634	1-215-778-91	METAL 47K 5% 1/6W		C102	1-123-356-00	ELECT 10MF 20% 16V	
R636	1-215-788-91	METAL 120K 5% 1/6W		C103	1-101-006-00	CERAMIC 0.047MF 50V	
R637	1-215-770-91	METAL 22K 5% 1/6W		C104	1-123-356-00	ELECT 10MF 20% 16V	
R638	1-215-430-00	METAL 2.4K 1% 1/6W		C105	1-123-356-00	ELECT 10MF 20% 16V	
R639	1-215-754-91	METAL 4.7K 5% 1/6W		C106	1-123-323-00	ELECT 470MF 20% 16V	
R640	1-215-192-81	METAL 47K 5% 1/4W		C107	1-123-330-00	ELECT 22MF 20% 16V	
R641	1-202-613-35	SOLID 47K 10% 1/2W		C108	1-110-173-81	MYLAR 0.068MF 10% 100V	
R642	1-205-758-11	CEMENTED 100 10% 10W	F	C109	1-110-173-81	MYLAR 0.068MF 10% 100V	
R651	1-216-477-11	METAL OXIDE 270 5% 3W	F	C110	1-102-963-00	CERAMIC 33PF 5% 50V	
R652	1-216-430-11	METAL OXIDE 390 5% 1W	F				
R653	1-215-754-91	METAL 4.7K 5% 1/6W					
R654	1-216-464-11	METAL OXIDE 18K 5% 2W	F				
R655	1-215-794-91	METAL 220K 5% 1/6W					
R656	1-215-778-91	METAL 47K 5% 1/6W					

The components identified by shading and mark **A** are critical for safety. Replace only with part number specified.

A

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
C111	1-123-318-00	ELECT	33MF 20% 16V	C170	1-123-356-00	ELECT	10MF 20% 16V
C112	1-102-527-00	CERAMIC	82PF 5% 50V	C171	1-123-318-00	ELECT	33MF 20% 16V
C113	1-102-510-00	CERAMIC	12PF 5% 50V	C172	1-123-379-00	ELECT	0.47MF 20% 50V
C115	1-102-852-00	CERAMIC	47PF 5% 50V	C173	1-123-379-00	ELECT	0.47MF 20% 50V
C116	1-102-125-00	CERAMIC	0.0047MF 10% 50V	C174	1-110-190-81	MYLAR	0.01MF 10% 400V
C117	1-102-125-00	CERAMIC	0.0047MF 10% 50V	C175	1-110-190-81	MYLAR	0.01MF 10% 400V
C118	1-102-125-00	CERAMIC	0.0047MF 10% 50V	C176	1-123-332-00	ELECT	47MF 20% 16V
C119	1-110-175-81	MYLAR	0.1MF 10% 100V	C177	1-123-332-00	ELECT	47MF 20% 16V
C120	1-102-125-00	CERAMIC	0.0047MF 10% 50V	C179	1-110-179-81	MYLAR	0.22MF 10% 100V
C122	1-123-330-00	ELECT	22MF 20% 16V	C180	1-110-179-81	MYLAR	0.22MF 10% 100V
C123	1-101-361-00	CERAMIC	150PF 5% 50V	C182	1-123-307-00	ELECT	100MF 20% 10V
C124	1-104-069-00	POLYSTYRENE	470PF 5% 50V	C183	1-101-361-00	CERAMIC	150PF 5% 50V
C125	1-101-361-00	CERAMIC	150PF 5% 50V	C184	1-102-973-00	CERAMIC	100PF 5% 50V
C126	1-123-318-00	ELECT	33MF 20% 16V	C185	1-103-741-00	POLYSTYRENE	0.0047MF 5% 50V
C127	1-102-125-00	CERAMIC	0.0047MF 10% 50V	C186	1-123-356-00	ELECT	10MF 20% 16V
C128	1-101-004-00	CERAMIC	0.01MF 50V	C187	1-110-190-81	MYLAR	0.01MF 10% 400V
C129	1-101-004-00	CERAMIC	0.01MF 50V	C188	1-102-125-00	CERAMIC	0.0047MF 10% 50V
C130	1-102-125-00	CERAMIC	0.0047MF 10% 50V	C189	1-123-369-00	ELECT	4.7MF 20% 50V
C131	1-123-381-00	ELECT	2.2MF 20% 50V	C190	1-110-190-81	MYLAR	0.01MF 10% 400V
C132	1-102-125-00	CERAMIC	0.0047MF 10% 50V	C191	1-102-816-00	CERAMIC	120PF 5% 50V
C133	1-102-125-00	CERAMIC	0.0047MF 10% 50V	C192	1-161-319-00	CERAMIC	470PF 10% 50V
C134	1-102-125-00	CERAMIC	0.0047MF 10% 50V	<u>DISCRIMINATOR</u>			
C135	1-102-525-00	CERAMIC	68PF 5% 50V	CD151	1-404-501-00	DISCRIMINATOR, CERAMIC	
C136	1-102-525-00	CERAMIC	68PF 5% 50V	<u>FILTER</u>			
C137	1-102-125-00	CERAMIC	0.0047MF 10% 50V	CF101	1-527-840-00	FILTER, CERAMIC	
C138	1-123-380-00	ELECT	1MF 20% 50V	CF102	1-404-134-00	TRAP, CERAMIC (5.5MHZ)	
C139	1-102-125-00	CERAMIC	0.0047MF 10% 50V	CF151	1-527-839-00	FILTER, CERAMIC	
C140	1-102-125-00	CERAMIC	0.0047MF 10% 50V	SWF101	1-404-438-00	FILTER, SAW	
C141	1-123-318-00	ELECT	33MF 20% 16V	<u>DIODE</u>			
C142	1-102-525-00	CERAMIC	68PF 5% 50V	D101	8-719-911-19	DIODE 1SS119	
C143	1-102-934-00	CERAMIC	1PF 0.25PF 50V	D102	8-719-911-19	DIODE 1SS119	
C144	1-123-609-00	ELECT	0.33MF 20% 50V	D103	8-719-102-71	DIODE RD5.6E-N2	
C145	1-102-961-00	CERAMIC	27PF 5% 50V	D104	8-719-911-19	DIODE 1SS119	
C146	1-123-380-00	ELECT	1MF 20% 50V	D105	8-719-911-19	DIODE 1SS119	
C147	1-130-072-00	FILM	0.022MF 2% 100V	D108	8-719-911-19	DIODE 1SS119	
C148	1-110-186-81	MYLAR	0.0047MF 10% 400V	D109	8-719-911-19	DIODE 1SS119	
C150	1-102-520-00	CERAMIC	39PF 5% 50V	D110	8-719-911-19	DIODE 1SS119	
C151	1-101-004-00	CERAMIC	0.01MF 50V	D111	8-719-911-19	DIODE 1SS119	
C152	1-101-004-00	CERAMIC	0.01MF 50V	D112	8-719-911-19	DIODE 1SS119	
C153	1-123-356-00	ELECT	10MF 20% 16V	D152	8-719-911-19	DIODE 1SS119	
C154	1-101-004-00	CERAMIC	0.01MF 50V	D153	8-719-911-19	DIODE 1SS119	
C155	1-123-332-00	ELECT	47MF 20% 16V	D154	8-719-911-19	DIODE 1SS119	
C156	1-123-306-00	ELECT	47MF 20% 10V	<u>IC</u>			
C157	1-123-306-00	ELECT	47MF 20% 10V	IC101	8-759-909-08	IC TDA3541	
C158	1-123-379-00	ELECT	0.47MF 20% 50V	IC102	8-759-909-54	IC TDA2546A	
C159	1-102-816-00	CERAMIC	120PF 5% 50V	IC103	6-066-720-50	IC TDA2595	
C160	1-102-125-00	CERAMIC	0.0047MF 10% 50V	IC151	8-759-007-54	IC TDA4940	
C161	1-123-318-00	ELECT	33MF 20% 16V	IC152	8-759-007-55	IC TDA4944	
C164	1-108-620-91	MYLAR	0.0033MF 10% 100V				
C165	1-108-620-91	MYLAR	0.0033MF 10% 100V				
C167	1-108-620-91	MYLAR	0.0033MF 10% 100V				
C168	1-108-620-91	MYLAR	0.0033MF 10% 100V				
C169	1-123-356-00	ELECT	10MF 20% 16V				



Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
COIL							
L102	1-404-476-00	COIL, IF		R121	1-215-742-91	METAL 1.5K 5% 1/6W	
L103	1-408-399-00	MICRO INDUCTOR 1.5UH		R122	1-215-762-91	METAL 10K 5% 1/6W	
L104	1-408-406-00	MICRO INDUCTOR 5.6UH		R125	1-215-736-91	METAL 820 5% 1/6W	
L105	1-404-477-00	COIL, IF		R126	1-215-736-91	METAL 820 5% 1/6W	
L106	1-404-493-00	COIL		R127	1-215-736-91	METAL 820 5% 1/6W	
L107	1-404-493-00	COIL		R129	1-215-810-91	METAL 1M 5% 1/6W	
L108	1-404-691-11	VIFT		R131	1-215-762-91	METAL 10K 5% 1/6W	
L109	1-408-409-00	MICRO INDUCTOR 10UH		R134	1-215-770-91	METAL 22K 5% 1/6W	
L110	1-408-406-00	MICRO INDUCTOR 5.6UH		R135	1-215-776-91	METAL 39K 5% 1/6W	
L111	1-404-493-00	COIL		R136	1-215-770-91	METAL 22K 5% 1/6W	
L113	1-408-226-00	MICRO INDUCTOR 82UH		R137	1-215-770-91	METAL 22K 5% 1/6W	
L115	1-408-405-00	MICRO INDUCTOR 4.7UH		R141	1-215-766-91	METAL 15K 5% 1/6W	
L116	1-408-406-00	MICRO INDUCTOR 5.6UH		R142	1-215-786-91	METAL 100K 5% 1/6W	
L117	1-408-428-00	MICRO INDUCTOR 390UH		R143	1-215-786-91	METAL 100K 5% 1/6W	
L161	1-408-429-00	MICRO INDUCTOR 470UH		R145	1-215-752-91	METAL 3.9K 5% 1/6W	
L171	1-408-408-00	MICRO INDUCTOR 8.2UH		R146	1-215-184-00	METAL 22K 5% 1/4W	
L172	1-408-421-00	MICRO INDUCTOR 100UH		R150	1-215-726-91	METAL 330 5% 1/6W	
TRANSISTOR				R151	1-215-732-91	METAL 560 5% 1/6W	
Q101	8-729-178-54	TRANSISTOR 2SC2785		R152	1-215-776-91	METAL 39K 5% 1/6W	
Q102	8-729-105-47	TRANSISTOR 2SC2026-L		R153	1-215-728-91	METAL 390 5% 1/6W	
Q105	8-729-117-54	TRANSISTOR 2SA1175		R154	1-215-714-91	METAL 100 5% 1/6W	
Q106	8-729-900-61	TRANSISTOR DTA114ES		R155	1-215-770-91	METAL 22K 5% 1/6W	
Q107	8-729-900-61	TRANSISTOR DTA114ES		R156	1-215-784-91	METAL 82K 5% 1/6W	
Q108	8-729-900-61	TRANSISTOR DTA114ES		R157	1-215-726-91	METAL 330 5% 1/6W	
Q109	8-729-900-61	TRANSISTOR DTA114ES		R158	1-215-726-91	METAL 330 5% 1/6W	
Q151	8-729-178-54	TRANSISTOR 2SC2785		R159	1-215-754-91	METAL 4.7K 5% 1/6W	
Q152	8-729-178-54	TRANSISTOR 2SC2785		R160	1-215-754-91	METAL 4.7K 5% 1/6W	
Q153	8-729-178-54	TRANSISTOR 2SC2785		R161	1-215-754-91	METAL 4.7K 5% 1/6W	
Q154	8-729-900-89	TRANSISTOR DTC144ES		R162	1-215-754-91	METAL 4.7K 5% 1/6W	
Q157	8-729-900-89	TRANSISTOR DTC144ES		R163	1-215-738-91	METAL 1K 5% 1/6W	
Q158	8-729-900-89	TRANSISTOR DTC144ES		R171	1-215-766-91	METAL 15K 5% 1/6W	
Q175	8-729-178-54	TRANSISTOR 2SC2785		R172	1-215-128-00	METAL 100 5% 1/4W	
RESISTOR				R174	1-215-788-91	METAL 120K 5% 1/6W	
R101	1-215-762-91	METAL 10K 5% 1/6W		R175	1-215-764-91	METAL 12K 5% 1/6W	
R105	1-215-762-91	METAL 10K 5% 1/6W		R176	1-215-786-91	METAL 100K 5% 1/6W	
R106	1-215-750-91	METAL 3.3K 5% 1/6W		R178	1-215-762-91	METAL 10K 5% 1/6W	
R107	1-215-164-00	METAL 3.3K 5% 1/4W		R179	1-215-762-91	METAL 10K 5% 1/6W	
R108	1-215-798-91	METAL 330K 5% 1/6W		R180	1-215-738-91	METAL 1K 5% 1/6W	
R109	1-215-746-91	METAL 2.2K 5% 1/6W		R181	1-215-740-91	METAL 1.2K 5% 1/6W	
R110	1-215-746-91	METAL 2.2K 5% 1/6W		R182	1-215-746-91	METAL 2.2K 5% 1/6W	
R111	1-215-754-91	METAL 4.7K 5% 1/6W		R183	1-215-738-91	METAL 1K 5% 1/6W	
R112	1-215-744-91	METAL 1.8K 5% 1/6W		R184	1-215-736-91	METAL 820 5% 1/6W	
R113	1-215-752-91	METAL 3.9K 5% 1/6W		R185	1-215-726-91	METAL 330 5% 1/6W	
R114	1-215-722-91	METAL 220 5% 1/6W		R188	1-215-766-91	METAL 15K 5% 1/6W	
R115	1-215-750-91	METAL 3.3K 5% 1/6W		R191	1-215-726-91	METAL 330 5% 1/6W	
R116	1-215-730-91	METAL 470 5% 1/6W		R192	1-215-726-91	METAL 330 5% 1/6W	
R117	1-215-710-91	METAL 68 5% 1/6W		R193	1-215-714-91	METAL 100 5% 1/6W	
R118	1-215-724-91	METAL 270 5% 1/6W		VARIABLE RESISTOR			
R120	1-215-778-91	METAL 47K 5% 1/6W		RV101	1-230-633-51	RES, ADJ, CARBON 47K	
				RV151	1-230-632-11	RES, ADJ, CARBON 33K	
				RV171	1-230-633-51	RES, ADJ, CARBON 47K	



Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
<u>TUNER</u>				D008	8-719-102-78	DIODE RD6.8E-N2	
TU101A 1-463-523-11 TUNER, ET (UHF/VHF) (UV417)				D009	8-719-102-71	DIODE RD5.6E-N2	
*****				<u>IC</u>			
*A-1325-023-A V BOARD, COMPLETE (KV-21XRTD ONLY)				IC001	8-759-933-45	IC MAB8441P-T060	
*****				IC002	8-759-918-54	IC SAA5230	
				IC003	8-759-918-56	IC SAA5240A	
					*1-526-722-00	SOCKET, IC 40P; IC003	
				IC004	8-759-206-27	IC TC5564PL-15	
<u>CAPACITOR</u>				<u>COIL</u>			
C001	1-123-333-00	ELECT	100MF	20%	16V		
C002	1-123-308-00	ELECT	220MF	20%	6.3V		
C003	1-123-309-00	ELECT	330MF	20%	10V		
C004	1-123-332-00	ELECT	47MF	20%	16V		
C005	1-123-333-00	ELECT	100MF	20%	16V		
C006	1-123-321-00	ELECT	220MF	20%	16V		
C007	1-123-356-00	ELECT	10MF	20%	16V		
C008	1-102-951-00	CERAMIC	15PF	5%	50V		
C009	1-102-074-00	CERAMIC	0.001MF	10%	50V		
C010	1-102-824-21	CERAMIC	470PF	5%	50V		
C011	1-110-182-81	MYLAR	0.022MF	10%	250V		
C012	1-102-980-00	CERAMIC	270PF	5%	50V		
C013	1-102-973-00	CERAMIC	100PF	5%	50V		
C014	1-102-951-00	CERAMIC	15PF	5%	50V		
C015	1-102-961-00	CERAMIC	27PF	5%	50V		
C016	1-110-190-81	MYLAR	0.01MF	10%	400V		
C017	1-110-171-81	MYLAR	0.047MF	10%	100V		
C018	1-102-953-00	CERAMIC	18PF	5%	50V		
C019	1-110-171-81	MYLAR	0.047MF	10%	100V		
C020	1-102-978-00	CERAMIC	220PF	5%	50V		
C021	1-110-173-81	MYLAR	0.068MF	10%	100V		
C022	1-102-961-00	CERAMIC	27PF	5%	50V		
C023	1-102-961-00	CERAMIC	27PF	5%	50V		
C024	1-123-307-00	ELECT	100MF	20%	10V		
C025	1-123-306-00	ELECT	47MF	20%	10V		
C027	1-102-820-00	CERAMIC	330PF	5%	50V		
C028	1-102-116-00	CERAMIC	680PF	10%	50V		
C029	1-123-369-00	ELECT	4.7MF	20%	25V		
C051	1-110-175-81	MYLAR	0.1MF	10%	100V		
C052	1-110-175-81	MYLAR	0.1MF	10%	100V		
C053	1-110-175-81	MYLAR	0.1MF	10%	100V		
C054	1-110-175-81	MYLAR	0.1MF	10%	100V		
C055	1-110-175-81	MYLAR	0.1MF	10%	100V		
C056	1-110-175-81	MYLAR	0.1MF	10%	100V		
<u>TRIMMER</u>				<u>RESISTOR</u>			
CT001	1-141-181-11	CAP, TRIMMER		R001	1-247-745-11	CARBON	330 5% 1/2W
<u>DIODE</u>				R002	1-215-762-91	METAL	10K 5% 1/6W
D001	8-719-100-35	DIODE RD5.6E-B2		R003	1-215-778-91	METAL	47K 5% 1/6W
D002	8-719-100-68	DIODE RD13E-B2		R004	1-215-867-00	METAL OXIDE	470 5% 1W F
D003	8-719-911-19	DIODE 1SS119		R005	1-215-714-91	METAL	100 5% 1/6W
D004	8-719-100-19	DIODE RD3.6E-B2		R006	1-215-738-91	METAL	1K 5% 1/6W
				R007	1-215-714-91	METAL	100 5% 1/6W
				R008	1-215-726-91	METAL	330 5% 1/6W
				R009	1-215-780-91	METAL	56K 5% 1/6W
				R011	1-215-754-91	METAL	4.7K 5% 1/6W
				R012	1-215-754-91	METAL	4.7K 5% 1/6W
				R013	1-215-714-91	METAL	100 5% 1/6W
				R014	1-215-714-91	METAL	100 5% 1/6W
				R015	1-215-810-91	METAL	1M 5% 1/6W
				R016	1-215-744-91	METAL	1.8K 5% 1/6W
				R017	1-215-738-91	METAL	1K 5% 1/6W
				R018	1-215-754-91	METAL	4.7K 5% 1/6W
				R019	1-215-730-91	METAL	470 5% 1/6W
				R020	1-215-756-91	METAL	5.6K 5% 1/6W
				R021	1-215-746-91	METAL	2.2K 5% 1/6W
				R022	1-215-746-91	METAL	2.2K 5% 1/6W
				R023	1-215-738-91	METAL	1K 5% 1/6W
				R024	1-215-746-91	METAL	2.2K 5% 1/6W

The components identified by shading and mark A are critical for safety. Replace only with part number specified.



Ref.No.	Part No.	Description				
R025	1-215-754-91	METAL	4.7K	5%	1/6W	
R026	1-215-762-91	METAL	10K	5%	1/6W	
R027	1-215-702-91	METAL	33	5%	1/6W	
R028	1-215-702-91	METAL	33	5%	1/6W	
R029	1-215-702-91	METAL	33	5%	1/6W	
R030	1-215-130-00	METAL	120	5%	1/4W	
R031	1-215-130-00	METAL	120	5%	1/4W	
R032	1-215-130-00	METAL	120	5%	1/4W	
R033	1-215-712-91	METAL	82	5%	1/6W	
R034	1-215-738-91	METAL	1K	5%	1/6W	
R037	1-215-714-91	METAL	100	5%	1/6W	
R038	1-215-736-91	METAL	820	5%	1/6W	
R040	1-215-754-91	METAL	4.7K	5%	1/6W	
R041	1-215-730-91	METAL	470	5%	1/6W	
R043	1-215-746-91	METAL	2.2K	5%	1/6W	
R044	1-215-730-91	METAL	470	5%	1/6W	
R045	1-215-738-91	METAL	1K	5%	1/6W	
R046	1-215-690-91	METAL	10	5%	1/6W	

VARIABLE RESISTOR

RV001 1-230-628-11 RES, ADJ, CARBON 2.2K

CONNECTOR

V1 *1-560-123-00 PLUG, CONNECTOR (2.5MM) 3P
V2 *1-560-125-00 PLUG, CONNECTOR (2.5MM) 5P
V3 *1-560-126-00 PLUG, CONNECTOR (2.5MM) 6P
V4 *1-560-123-00 PLUG, CONNECTOR (2.5MM PITCH)
V5 *1-560-290-00 PLUG, CONNECTOR (2.5MM PITCH)

CRYSTAL

X001 1-567-162-00 OSCILLATOR, CRYSTAL
X002 1-567-495-11 OSCILLATOR, CRYSTAL
X003 1-567-192-11 OSCILLATOR, CERAMIC

*A-1330-686-A C BOARD, COMPLETE

CONNECTOR

C1 *1-506-371-00 2P PLUG (L)
C2 *1-564-880-31 PLUG, CONNECTOR 3P
C3 *1-508-766-00 4P PLUG (M)
C4 *1-564-884-11 PLUG, CONNECTOR 7P
C6 *1-508-784-00 1P PLUG

CAPACITOR

C701 1-123-947-00 ELECT 10MF 20% 250V
C702 1-123-356-00 ELECT 10MF 20% 16V
C703 1-123-356-00 ELECT 10MF 20% 16V
C704 1-162-114-00 CERAMIC 0.0047MF 2KV
C705 1-162-116-00 CERAMIC 680PF 10% 2KV
C708 1-102-116-00 CERAMIC 680PF 10% 50V

Ref.No.	Part No.	Description				
C709	1-102-116-00	CERAMIC	680PF	10%	50V	
C710	1-102-116-00	CERAMIC	680PF	10%	50V	
C712	1-162-583-11	CERAMIC	330PF	10%	400V	
C713	1-102-947-00	CERAMIC	10PF	5%	50V	
C714	1-102-937-00	CERAMIC	4PF	0.25PF	50V	
C715	1-102-937-00	CERAMIC	4PF	0.25PF	50V	
C716	1-123-382-00	ELECT	3.3MF	20%	50V	
C717	1-123-356-00	ELECT	10MF	20%	16V	
C718	1-101-006-00	CERAMIC	0.047MF		50V	
C719	1-102-963-00	CERAMIC	33PF	5%	50V	
C720	1-102-963-00	CERAMIC	33PF	5%	50V	
C721	1-102-963-00	CERAMIC	33PF	5%	50V	

DIODE

D701 8-719-911-19 DIODE 1SS119
D702 8-719-911-19 DIODE 1SS119
D703 8-719-911-19 DIODE 1SS119
D704 8-719-911-19 DIODE 1SS119
D705 8-719-911-19 DIODE 1SS119
D706 8-719-911-19 DIODE 1SS119
D708 8-719-911-19 DIODE 1SS119
D709 8-719-911-19 DIODE 1SS119
D710 8-719-911-19 DIODE 1SS119

JACK

J701 1-526-798-41 SOCKET, CRT

COIL

L701 1-408-420-00 MICRO INDUCTOR 82UH
L702 1-410-512-11 MICRO INDUCTOR 18UH
L703 1-410-331-11 MICRO INDUCTOR 33UH
L704 1-410-331-11 MICRO INDUCTOR 33UH

TRANSISTOR

Q701 8-729-802-47 TRANSISTOR 2SC3504
Q702 8-729-802-47 TRANSISTOR 2SC3504
Q703 8-729-802-47 TRANSISTOR 2SC3504
Q704 8-729-326-11 TRANSISTOR 2SC2611
Q705 8-729-326-11 TRANSISTOR 2SC2611
Q706 8-729-326-11 TRANSISTOR 2SC2611
Q707 8-729-200-17 TRANSISTOR 2SA1091
Q708 8-729-200-17 TRANSISTOR 2SA1091
Q709 8-729-200-17 TRANSISTOR 2SA1091
Q710 8-729-255-12 TRANSISTOR 2SC2551
Q711 8-729-255-12 TRANSISTOR 2SC2551
Q712 8-729-255-12 TRANSISTOR 2SC2551
Q713 8-729-117-54 TRANSISTOR 2SA1175
Q714 8-729-900-36 TRANSISTOR DTC124ES
Q715 8-729-178-54 TRANSISTOR 2SC2785

RESISTOR

R701 1-215-750-91 METAL 3.3K 5% 1/6W
R702 1-215-748-91 METAL 2.7K 5% 1/6W

C

D1

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
R703	1-215-748-91	METAL	2.7K 5% 1/6W	*1-617-753-11	D1 BOARD		
R704	1-214-912-00	METAL	91K 1% 1/2W		*****		
R705	1-214-912-00	METAL	91K 1% 1/2W				
R706	1-214-912-00	METAL	91K 1% 1/2W				
R707	1-215-738-91	METAL	1K 5% 1/6W				
					CAPACITOR		
R708	1-215-738-91	METAL	1K 5% 1/6W	C1501	1-110-182-81	MYLAR	0.022MF 10% 250V
R709	1-215-738-91	METAL	1K 5% 1/6W	C1503	1-110-190-81	MYLAR	0.01MF 10% 400V
R710	1-215-774-91	METAL	33K 5% 1/6W	C1504	1-123-380-00	ELECT	1MF 20% 50V
R711	1-215-774-91	METAL	33K 5% 1/6W	C1505	1-110-186-81	MYLAR	0.0047MF 10% 400V
R712	1-215-774-91	METAL	33K 5% 1/6W	C1511	1-123-380-00	ELECT	1MF 20% 50V
R713	1-216-486-00	METAL OXIDE	8.2K 5% 3W F	C1512	1-110-190-81	MYLAR	0.01MF 10% 400V
R714	1-216-486-00	METAL OXIDE	8.2K 5% 3W F	C1520	1-123-333-00	ELECT	100MF 20% 16V
R715	1-216-486-00	METAL OXIDE	8.2K 5% 3W F	C1526	1-102-125-00	CERAMIC	0.0047MF 10% 50V
R716	1-247-710-11	CARBON	560 5% 1/4W F	C1527	1-110-175-81	MYLAR	0.1MF 10% 100V
R717	1-247-710-11	CARBON	560 5% 1/4W F				
					CONNECTOR		
R718	1-247-710-11	CARBON	560 5% 1/4W F	CNJ1	*1-562-370-21	CONNECTOR, BOARD TO BOARD 18P	
R719	1-202-821-11	SOLID	1.8K 10% 1/2W				
R720	1-202-821-11	SOLID	1.8K 10% 1/2W		IC		
R721	1-202-821-11	SOLID	1.8K 10% 1/2W	IC1501	8-759-905-39	IC TDA1082	
R722	1-215-734-91	METAL	680 5% 1/6W				
					RESISTOR		
R723	1-215-762-91	METAL	10K 5% 1/6W	R1501	1-215-712-91	METAL	82 5% 1/6W
R724	1-215-744-91	METAL	1.8K 5% 1/6W	R1502	1-215-166-00	METAL	3.9K 5% 1/4W
R726	1-217-694-11	WIREWOUND	0.82 10% 1/2W	R1504	1-215-768-91	METAL	18K 5% 1/6W
R727	1-202-838-00	SOLID	100K 10% 1/2W	R1505	1-215-750-91	METAL	3.3K 5% 1/6W
R728	1-202-838-00	SOLID	100K 10% 1/2W	R1506	1-215-768-91	METAL	18K 5% 1/6W
R729	1-202-842-91	SOLID	220K 10% 1/2W	R1508	1-215-768-91	METAL	18K 5% 1/6W
R733	1-214-773-00	METAL	68K 1% 1/4W	R1509	1-215-132-00	METAL	150 5% 1/4W
R734	1-214-787-00	METAL	270K 1% 1/4W	R1510	1-215-738-91	METAL	1K 5% 1/6W
R735	1-214-958-00	METAL	560K 1% 1/4W	R1511	1-215-214-81	METAL	390K 5% 1/4W
R736	1-202-848-00	SOLID	680K 10% 1/2W	R1512	1-215-802-91	METAL	470K 5% 1/6W
R737	1-215-744-91	METAL	1.8K 5% 1/6W	R1513	1-215-736-91	METAL	820 5% 1/6W
R738	1-215-744-91	METAL	1.8K 5% 1/6W	R1514	1-215-722-91	METAL	220 5% 1/6W
R739	1-215-744-91	METAL	1.8K 5% 1/6W	R1518	1-215-192-00	METAL	47K 5% 1/4W
R740	1-215-706-91	METAL	47 5% 1/6W	R1523	1-215-760-91	METAL	8.2K 5% 1/6W
R741	1-215-758-91	METAL	6.8K 5% 1/6W	R1536	1-215-776-91	METAL	39K 5% 1/6W
R742	1-215-766-91	METAL	15K 5% 1/6W		VARIABLE RESISTOR		
R743	1-215-766-91	METAL	15K 5% 1/6W	RV1501	1-230-625-11	RES, ADJ, CARBON 330	
R744	1-215-738-91	METAL	1K 5% 1/6W	RV1502	1-230-634-51	RES, ADJ, CARBON 100K	
R745	1-215-722-91	METAL	220 5% 1/6W	RV1503	1-230-634-51	RES, ADJ, CARBON 100K	
R746	1-215-746-91	METAL	2.2K 5% 1/6W	RV1504	1-226-771-00	RES, ADJ, METAL GLAZE 1K	
				RV1506	1-230-634-51	RES, ADJ, CARBON 100K	
R750	1-249-405-11	CARBON	100 5% 1/6W F	RV1507	1-230-630-11	RES, ADJ, CARBON 10K	
R770	1-215-762-91	METAL	10K 5% 1/6W				
					THERMISTOR		
				TH1501	1-806-110-00	THERMISTOR	
				TH1502	1-800-625-00	THERMISTOR	

The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

D3 D

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
*1-618-128-11 D3 BOARD *****				C006	1-123-307-00	ELECT 100MF	20% 6.3V
				C007	1-102-820-00	CERAMIC 330PF	5% 50V
CAPACITOR				C009	1-102-822-00	CERAMIC 390PF	5% 50V
C1301	1-136-171-00	FILM 0.33MF	5% 50V	C010	1-102-514-00	CERAMIC 22PF	5% 50V
C1302	1-136-171-00	FILM 0.33MF	5% 50V	C011	1-102-525-00	CERAMIC 68PF	5% 50V
C1303	1-102-529-00	CERAMIC 100PF	5% 50V	C012	1-123-607-00	ELECT 0.1MF	20% 50V
C1304	1-102-529-00	CERAMIC 100PF	5% 50V	C013	1-102-973-00	CERAMIC 100PF	5% 50V
C1305	1-104-108-11	POLYSTYRENE 330PF	10% 50V	C014	1-110-190-81	MYLAR 0.01MF	10% 400V
C1306	1-102-824-21	CERAMIC 470PF	5% 50V	C015	1-123-307-00	ELECT 100MF	20% 6.3V
C1307	1-102-824-21	CERAMIC 470PF	5% 50V	C016	1-102-129-00	CERAMIC 0.01MF	10% 50V
C1308	1-123-321-00	ELECT 220MF	20% 16V	C018	1-123-356-00	ELECT 10MF	20% 50V
C1309	1-123-380-00	ELECT 1MF	20% 50V	C019	1-123-356-00	ELECT 10MF	20% 50V
C1310	1-123-318-00	ELECT 33MF	20% 16V	C020	1-123-307-00	ELECT 100MF	20% 6.3V
C1311	1-123-318-00	ELECT 33MF	20% 16V	C022	1-110-190-81	MYLAR 0.01MF	10% 400V
CONNECTOR				C026	1-110-182-81	MYLAR 0.022MF	10% 250V
CNJ3	*1-562-370-21	CONNECTOR, BOARD TO BOARD 18P		C027	1-102-973-00	CERAMIC 100PF	5% 50V
DIODE				C028	1-102-973-00	CERAMIC 100PF	5% 50V
D1301	8-719-000-12	DIODE MC931		C031	1-162-290-31	CERAMIC 470PF	10% 50V
D1302	8-719-000-12	DIODE MC931		C032	1-102-129-00	CERAMIC 0.01MF	10% 50V
D1303	8-719-000-12	DIODE MC931		C033	1-123-306-00	ELECT 47MF	20% 6.3V
D1304	8-719-911-19	DIODE 1SS119		C034	1-123-306-00	ELECT 47MF	20% 6.3V
D1305	8-719-911-19	DIODE 1SS119		C035	1-123-380-00	ELECT 1MF	20% 50V
IC				C036	1-123-380-00	ELECT 1MF	20% 50V
IC1301	8-759-913-37	IC TDA4560		C037	1-123-356-00	ELECT 10MF	20% 50V
COIL				C061	1-110-175-81	MYLAR 0.1MF	10% 100V
L1301	1-408-423-00	MICRO INDUCTOR 150UH		C062	1-101-361-00	CERAMIC 150PF	5% 50V
TRANSISTOR				C063	1-123-380-00	ELECT 1MF	20% 50V
Q1301	8-729-178-54	TRANSISTOR 2SC2785		C271	1-123-343-00	ELECT 33MF	20% 25V
RESISTOR				C273	1-123-359-00	ELECT 47MF	20% 50V
R1301	1-215-714-91	METAL 100 5% 1/6W		C274	1-123-364-00	ELECT 1000MF	20% 50V
R1302	1-215-714-91	METAL 100 5% 1/6W		C275	1-123-343-00	ELECT 33MF	20% 25V
R1303	1-215-423-00	METAL 1.2K 1% 1/6W		C276	1-123-359-00	ELECT 47MF	20% 50V
R1304	1-215-762-91	METAL 10K 5% 1/6W		C278	1-123-349-00	ELECT 1000MF	20% 35V
R1305	1-215-766-91	METAL 15K 5% 1/6W		C279	1-123-343-00	ELECT 33MF	20% 25V
R1306	1-215-190-00	METAL 39K 5% 1/4W		C280	1-123-349-00	ELECT 1000MF	20% 35V
R1307	1-215-776-91	METAL 39K 5% 1/6W		C281	1-123-360-00	ELECT 100MF	20% 50V
*****				C282	1-101-005-00	CERAMIC 0.022MF	50V
*A-1345-602-A D BOARD, COMPLETE *****				C283	1-101-005-00	CERAMIC 0.022MF	50V
CAPACITOR				C284	1-102-973-00	CERAMIC 100PF	5% 50V
C001	1-123-380-00	ELECT 1MF	20% 50V	C285	1-102-973-00	CERAMIC 100PF	5% 50V
C002	1-123-369-00	ELECT 4.7MF	20% 50V	C286	1-102-125-00	CERAMIC 0.0047MF	10% 50V
C003	1-123-369-00	ELECT 4.7MF	20% 50V	C287	1-102-125-00	CERAMIC 0.0047MF	10% 50V
C004	1-102-973-00	CERAMIC 100PF	5% 50V	C401	1-123-381-00	ELECT 2.2MF	20% 50V
C005	1-110-175-81	MYLAR 0.1MF	10% 100V	C402	1-110-175-81	MYLAR 0.1MF	10% 100V
				C403	1-102-816-00	CERAMIC 120PF	5% 50V
				C406	1-131-373-00	TANTALUM 22MF	10% 16V
				C407	1-110-182-81	MYLAR 0.022MF	10% 250V
				C408	1-102-973-00	CERAMIC 100PF	5% 50V
				C409	1-131-344-00	TANTALUM 0.33MF	10% 35V
				C410	1-123-369-00	ELECT 4.7MF	20% 50V
				C411	1-124-645-11	ELECT 10MF	20% 16V
				C412	1-123-381-00	ELECT 2.2MF	20% 50V
				C413	1-110-182-81	MYLAR 0.022MF	10% 250V
				C414	1-110-182-81	MYLAR 0.022MF	10% 250V
				C415	1-123-369-00	ELECT 4.7MF	20% 50V

D

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
C416	1-124-002-11	ELECT	1MF 20% 50V	C565	1-106-182-00	MYLAR	0.0027MF 10% 100V
C417	1-131-344-00	TANTALUM	0.33MF 10% 35V	C566	1-123-318-00	ELECT	33MF 20% 16V
C418	1-131-344-00	TANTALUM	0.33MF 10% 35V	C567	1-110-116-11	MYLAR	0.068MF 10% 250V
C419	1-123-323-00	ELECT	470MF 20% 16V	C568	1-123-362-00	ELECT	330MF 20% 50V
C420	1-110-182-81	MYLAR	0.022MF 10% 250V	C569	1-131-348-00	TANTALUM	1.5MF 10% 35V
C421	1-110-182-81	MYLAR	0.022MF 10% 250V	C572	1-123-360-00	ELECT	100MF 20% 50V
C422	1-110-182-81	MYLAR	0.022MF 10% 250V	C801	1-123-362-00	ELECT	330MF 20% 50V
C423	1-101-880-00	CERAMIC	47PF 5% 50V	C803	1-110-192-81	MYLAR	0.015MF 10% 400V
C424	1-110-182-81	MYLAR	0.022MF 10% 250V	C804	1-123-948-00	ELECT	22MF 20% 250V
C425	1-110-182-81	MYLAR	0.022MF 10% 250V	C805	1-162-114-51	CERAMIC	0.0047MF 2KV
C426	1-110-182-81	MYLAR	0.022MF 10% 250V	C806	1-110-170-81	MYLAR	0.039MF 10% 100V
C427	1-110-179-81	MYLAR	0.22MF 10% 100V	C807	1-123-333-00	ELECT	100MF 20% 16V
C428	1-110-179-81	MYLAR	0.22MF 10% 100V	C808	1-123-333-00	ELECT	100MF 20% 16V
C429	1-110-179-81	MYLAR	0.22MF 10% 100V	C809	1-123-322-00	ELECT	330MF 20% 16V
C430	1-123-318-00	ELECT	33MF 20% 16V	C810	1-123-024-00	ELECT	33MF 160V
C431	1-123-318-00	ELECT	33MF 20% 16V	C811	1-136-308-11	FILM	0.68MF 5% 200V
C432	1-123-318-00	ELECT	33MF 20% 16V	C812	1-123-943-00	ELECT	1MF 20% 250V
C433	1-110-190-81	MYLAR	0.01MF 10% 400V	C813	1-102-244-00	CERAMIC	220PF 10% 500V
C434	1-123-318-00	ELECT	33MF 20% 16V	C814	1-110-172-81	MYLAR	0.056MF 10% 100V
C435	1-110-186-81	MYLAR	0.0047MF 10% 400V	C815	1-136-116-00	FILM	1MF 5% 200V
C436	1-123-318-00	ELECT	33MF 20% 16V	C817	1-136-483-11	FILM	0.0095MF 3% 1.4KV
C437	1-102-951-00	CERAMIC	15PF 5% 50V	C818	1-129-721-51	FILM	0.039MF 10% 630V
C438	1-123-321-00	ELECT	220MF 20% 16V	C819	1-161-754-00	CERAMIC	0.001MF 10% 3KV
C439	1-123-318-00	ELECT	33MF 20% 16V	C820	1-110-192-81	MYLAR	0.015MF 10% 400V
C501	1-123-356-00	ELECT	10MF 20% 50V	C821	1-102-327-11	CERAMIC	330PF 15% 1.5KV
C502	1-110-187-81	MYLAR	0.0056MF 10% 400V	C822	1-102-114-00	CERAMIC	470PF 10% 50V
C503	1-110-175-81	MYLAR	0.1MF 10% 100V	C823	1-110-186-81	MYLAR	0.0047MF 10% 400V
C504	1-123-332-00	ELECT	47MF 20% 16V	C824	1-102-157-00	CERAMIC	560PF 10% 500V
C505	1-130-023-00	FILM	0.0027MF 5% 50V	FILTER			
C506	1-110-175-81	MYLAR	0.1MF 10% 100V	CF001	1-567-686-11	OSCILLATOR, CERAMIC	
C508	1-123-379-00	ELECT	0.47MF 20% 50V	CONNECTOR			
C509	1-123-323-00	ELECT	470MF 20% 16V	CNP1	*1-564-346-00	CONNECTOR, BOARD TO BOARD 18P	
C511	1-108-614-91	MYLAR	0.001MF 10% 100V	CNP2	*1-564-346-00	CONNECTOR, BOARD TO BOARD 18P	
C512	1-124-013-11	ELECT	100MF 20% 16V	CNP3	*1-564-346-00	CONNECTOR, BOARD TO BOARD 18P	
C513	1-110-182-81	MYLAR	0.022MF 10% 250V	CNP4	*1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)	
C514	1-136-171-00	FILM	0.33MF 5% 50V	D1	*1-564-884-11	PLUG, CONNECTOR 7P	
C515	1-136-171-00	FILM	0.33MF 5% 50V	D2	*1-560-126-00	PLUG, CONNECTOR (2.5MM) 6P	
C516	1-101-361-00	CERAMIC	150PF 5% 50V	D3	*1-564-881-11	PLUG, CONNECTOR 4P	
C517	1-123-380-00	ELECT	1MF 20% 50V	D4	*1-564-880-31	PLUG, CONNECTOR 3P	
C518	1-123-330-00	ELECT	22MF 20% 16V	D5	*1-508-766-00	4P PLUG (M)	
C519	1-110-174-81	MYLAR	0.082MF 10% 100V	D7	*1-508-765-00	3P PLUG (M)	
C520	1-123-379-00	ELECT	0.47MF 20% 50V	D8	*1-564-883-11	PLUG, CONNECTOR 6P	
C521	1-123-369-00	ELECT	4.7MF 20% 50V	D9	*1-560-125-00	PLUG, CONNECTOR (2.5MM) 5P	
C522	1-123-380-00	ELECT	1MF 20% 50V	D10	*1-560-126-00	PLUG, CONNECTOR (2.5MM PITCH)	
C523	1-110-170-81	MYLAR	0.039MF 10% 100V	D11	*1-564-887-11	PLUG, CONNECTOR 10P	
C526	1-123-323-00	ELECT	470MF 20% 16V	D12	*1-564-879-21	PLUG, CONNECTOR 2P	
C527	1-123-336-00	ELECT	470MF 20% 25V	D13	*1-564-890-11	PLUG, CONNECTOR 13P	
C529	1-110-175-81	MYLAR	0.1MF 10% 100V	D14	*1-560-123-00	PLUG, CONNECTOR (2.5MM PITCH)	
C530	1-123-321-00	ELECT	220MF 20% 16V	D15	*1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P	
C560	1-129-743-00	FILM	0.022MF 10% 400V	D16	*1-564-880-31	PLUG, CONNECTOR 3P	
C561	1-123-357-00	ELECT	22MF 20% 50V	D17	*1-564-887-11	PLUG, CONNECTOR 10P	
C562	1-102-030-00	CERAMIC	330PF 10% 500V				
C563	1-123-931-00	ELECT	3.3MF 20% 160V				
C564	1-102-157-00	CERAMIC	560PF 10% 500V				

The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

Remark	Ref.No.	Part No.	Description	Remark
--------	---------	----------	-------------	--------

Description

D507	8-719-911-19	DIODE 1SS119
D508	8-719-911-19	DIODE 1SS119
D509	8-719-911-19	DIODE 1SS119
D510	8-719-911-19	DIODE 1SS119
D511	8-719-911-19	DIODE 1SS119

D560	8-719-901-93	DIODE	V19E
D561	8-719-901-93	DIODE	V19E
D562	8-719-901-93	DIODE	V19E
D563	8-719-901-93	DIODE	V19E
D564	8-719-911-19	DIODE	1SS119

D801	8-719-901-93	DIODE V19E
D802	8-719-901-93	DIODE V19E
D803	8-719-300-65	DIODE ES1F
D804	8-719-901-93	DIODE V19E
D805	8-719-901-93	DIODE V19E

D806	A.8-719-906-15	DIODE	ERC26-15S
D807	A.8-719-906-15	DIODE	ERC26-15S
D808	8-719-900-26	DIODE	ERD29-08J

IC

IC001	8-759-603-96	IC M50436-515SP
IC002	8-759-603-41	IC M58655P
IC004	8-759-157-40	IC UPC574J
IC251	8-749-943-62	IC STK-4362
	*4-368-684-01	SPRING (L): IC251

IC402	8-759-911-10	IC TDA3505
IC403	8-759-007-21	IC MC74HC4053N
IC404	8-759-007-21	IC MC74HC4053N
IC501	8-759-915-46	IC TDA2579
	*4-375-717-01	HEAT SINK, IC; IC501
IC502	8-759-403-61	IC AN78M12R

MODULE

IC401 1-235-534-11 CONTROL MODULE, PICTURE

COIL

L001	1-408-413-00	MICRO INDUCTOR 22UH
L002	1-408-425-00	MICRO INDUCTOR 220UH
L003	1-408-421-00	MICRO INDUCTOR 100UH
L802	1-421-329-00	COIL, CHOKE
L803	1-437-090-00	HDT
L804	1-408-239-00	MICRO INDUCTOR 4.7MMH

L805	1-459-626-11	HLC
L806	1-421-329-00	COIL, CHOKE
L807	1-407-365-00	COIL, CHOKE
L808	1-407-365-00	COIL, CHOKE
L809	1-407-365-00	COIL, CHOKE

L810 1-459-390-00 COIL (WITH CORE)

TRANSISTOR

Q001	8-729-177-32	TRANSISTOR	2SD773
Q002	8-729-117-54	TRANSISTOR	2SA1175
Q003	8-729-900-63	TRANSISTOR	DTA124ES

D

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
Q004	8-729-603-50	TRANSISTOR 2SC403SP		R014	1-215-176-00	METAL 10K 5% 1/4W	
Q005	8-729-117-54	TRANSISTOR 2SA1175		R015	1-215-178-00	METAL 12K 5% 1/4W	
Q006	8-729-900-89	TRANSISTOR DTC144ES		R016	1-215-184-00	METAL 22K 5% 1/4W	
Q007	8-729-177-32	TRANSISTOR 2SD773		R017	1-215-774-91	METAL 33K 5% 1/6W	
				R018	1-215-772-91	METAL 27K 5% 1/6W	
Q008	8-729-117-54	TRANSISTOR 2SA1175		R019	1-215-774-91	METAL 33K 5% 1/6W	
Q009	8-729-900-89	TRANSISTOR DTC144ES		R020	1-215-756-91	METAL 5.6K 5% 1/6W	
Q011	8-729-178-54	TRANSISTOR 2SC2785		R021	1-215-770-91	METAL 22K 5% 1/6W	
Q012	8-729-117-54	TRANSISTOR 2SA1175		R022	1-215-770-91	METAL 22K 5% 1/6W	
				R023	1-215-762-91	METAL 10K 5% 1/6W	
Q061	8-729-117-54	TRANSISTOR 2SA1175		R024	1-215-770-91	METAL 22K 5% 1/6W	
Q401	8-729-178-54	TRANSISTOR 2SC2785		R025	1-215-770-91	METAL 22K 5% 1/6W	
Q402	8-729-178-54	TRANSISTOR 2SC2785		R026	1-215-738-91	METAL 1K 5% 1/6W	
Q403	8-729-178-54	TRANSISTOR 2SC2785		R027	1-215-738-91	METAL 1K 5% 1/6W	
Q405	8-729-178-54	TRANSISTOR 2SC2785		R028	1-215-738-91	METAL 1K 5% 1/6W	
Q406	8-729-900-80	TRANSISTOR DTC114ES		R029	1-215-738-91	METAL 1K 5% 1/6W	
Q407	8-729-178-54	TRANSISTOR 2SC2785		R030	1-215-738-91	METAL 1K 5% 1/6W	
Q408	8-729-900-89	TRANSISTOR DTC144ES		R031	1-215-738-91	METAL 1K 5% 1/6W	
Q409	8-729-900-89	TRANSISTOR DTC144ES		R032	1-215-738-91	METAL 1K 5% 1/6W	
Q410	8-729-900-89	TRANSISTOR DTC144ES		R033	1-215-770-91	METAL 22K 5% 1/6W	
Q411	8-729-178-54	TRANSISTOR 2SC2785		R035	1-215-770-91	METAL 22K 5% 1/6W	
Q412	8-729-178-54	TRANSISTOR 2SC2785		R036	1-215-762-91	METAL 10K 5% 1/6W	
Q413	8-729-178-54	TRANSISTOR 2SC2785		R037	1-215-738-91	METAL 1K 5% 1/6W	
Q501	8-729-117-54	TRANSISTOR 2SA1175		R038	1-215-738-91	METAL 1K 5% 1/6W	
Q502	8-729-178-54	TRANSISTOR 2SC2785		R039	1-215-738-91	METAL 1K 5% 1/6W	
Q504	8-729-117-54	TRANSISTOR 2SA1175		R040	1-215-738-91	METAL 1K 5% 1/6W	
Q505	8-729-178-54	TRANSISTOR 2SC2785		R041	1-215-738-91	METAL 1K 5% 1/6W	
Q507	8-729-178-54	TRANSISTOR 2SC2785		R042	1-215-738-91	METAL 1K 5% 1/6W	
Q508	8-729-900-36	TRANSISTOR DTC124ES		R043	1-215-738-91	METAL 1K 5% 1/6W	
Q509	8-729-900-36	TRANSISTOR DTC124ES		R044	1-215-730-91	METAL 470 5% 1/6W	
Q560	8-729-169-02	TRANSISTOR 2SC2690A		R045	1-215-738-91	METAL 1K 5% 1/6W	
Q561	8-729-195-82	TRANSISTOR 2SC2958		R046	1-215-730-91	METAL 470 5% 1/6W	
Q562	8-729-122-02	TRANSISTOR 2SA1220A		R047	1-215-738-91	METAL 1K 5% 1/6W	
Q563	8-729-805-13	TRANSISTOR 2SC1475-13		R048	1-215-738-91	METAL 1K 5% 1/6W	
Q564	8-729-103-43	TRANSISTOR 2SB734		R049	1-215-754-91	METAL 4.7K 5% 1/6W	
Q801	8-729-805-13	TRANSISTOR 2SC1475-13		R050	1-215-128-00	METAL 100 5% 1/4W	
Q802	8-729-103-43	TRANSISTOR 2SB734		R052	1-215-900-11	METAL OXIDE 22K 5% 2W F	
Q803	8-719-801-06	THYRISTOR S6344G		R053	1-215-726-91	METAL 330 5% 1/6W	
	4-365-216-00	SPACER, MICA; Q803		R054	1-247-688-11	CARBON 10 5% 1/4W F	
	*4-368-683-01	SPRING; Q803		R055	1-215-730-91	METAL 470 5% 1/6W	
Q804	8-729-300-90	TRANSISTOR 2SD1497-06		R056	1-215-738-91	METAL 1K 5% 1/6W	
	4-363-414-00	SPACER, MICA; Q804		R057	1-215-762-91	METAL 10K 5% 1/6W	
	*4-368-683-01	SPRING; Q804		R058	1-215-754-91	METAL 4.7K 5% 1/6W	
Q805	8-729-168-82	TRANSISTOR 2SC2688		R060	1-215-766-91	METAL 15K 5% 1/6W	
				R061	1-215-778-91	METAL 47K 5% 1/6W	
<u>RESISTOR</u>				R062	1-215-788-91	METAL 120K 5% 1/6W	
R001	1-215-778-91	METAL 47K 5% 1/6W		R063	1-215-748-91	METAL 2.7K 5% 1/6W	
R002	1-215-778-91	METAL 47K 5% 1/6W		R064	1-215-730-91	METAL 470 5% 1/6W	
R003	1-215-770-91	METAL 22K 5% 1/6W		R065	1-215-774-91	METAL 33K 5% 1/6W	
R004	1-215-770-91	METAL 22K 5% 1/6W		R066	1-215-786-91	METAL 100K 5% 1/6W	
R005	1-215-738-91	METAL 1K 5% 1/6W		R067	1-215-762-91	METAL 10K 5% 1/6W	
R006	1-215-730-91	METAL 470 5% 1/6W		R068	1-215-762-91	METAL 10K 5% 1/6W	
R007	1-215-730-91	METAL 470 5% 1/6W		R070	1-215-136-00	METAL 220 5% 1/4W	
R008	1-215-730-91	METAL 470 5% 1/6W					
R009	1-215-738-91	METAL 1K 5% 1/6W					
R011	1-215-754-91	METAL 4.7K 5% 1/6W					
R012	1-215-754-91	METAL 4.7K 5% 1/6W					
R013	1-215-770-91	METAL 22K 5% 1/6W					

D

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
R071	1-215-730-91	METAL	470 5% 1/6W	R429	1-215-200-00	METAL	100K 5% 1/4W
R078	1-215-770-91	METAL	22K 5% 1/6W	R430	1-215-796-91	METAL	270K 5% 1/6W
R079	1-215-772-91	METAL	27K 5% 1/6W	R431	1-215-754-91	METAL	4.7K 5% 1/6W
R080	1-215-738-91	METAL	1K 5% 1/6W				
R081	1-215-766-91	METAL	15K 5% 1/6W	R433	1-215-720-91	METAL	180 5% 1/6W
				R434	1-215-720-91	METAL	180 5% 1/6W
R082	1-215-754-91	METAL	4.7K 5% 1/6W	R435	1-215-720-91	METAL	180 5% 1/6W
R084	1-215-750-91	METAL	3.3K 5% 1/6W	R436	1-215-778-91	METAL	47K 5% 1/6W
R085	1-215-754-91	METAL	4.7K 5% 1/6W	R437	1-215-144-00	METAL	470 5% 1/4W
R086	1-215-746-91	METAL	2.2K 5% 1/6W				
R087	1-247-688-11	CARBON	10 5% 1/4W F	R438	1-215-738-91	METAL	1K 5% 1/6W
R088	1-215-730-91	METAL	470 5% 1/6W	R439	1-215-394-00	METAL	75 1% 1/6W
				R440	1-215-394-00	METAL	75 1% 1/6W
R089	1-215-746-91	METAL	2.2K 5% 1/6W	R441	1-215-394-00	METAL	75 1% 1/6W
R090	1-215-762-91	METAL	10K 5% 1/6W	R442	1-214-702-00	METAL	75 1% 1/4W
R091	1-215-770-91	METAL	22K 5% 1/6W				
R092	1-215-810-91	METAL	1M 5% 1/6W	R443	1-215-802-91	METAL	470K 5% 1/6W
R093	1-215-762-91	METAL	10K 5% 1/6W	R444	1-215-802-91	METAL	470K 5% 1/6W
R094	1-215-762-91	METAL	10K 5% 1/6W	R445	1-215-802-91	METAL	470K 5% 1/6W
				R447	1-215-744-91	METAL	1.8K 5% 1/6W
R095	1-215-738-91	METAL	1K 5% 1/6W	R448	1-215-744-91	METAL	1.8K 5% 1/6W
R096	1-215-766-91	METAL	15K 5% 1/6W				
R097	1-215-754-91	METAL	4.7K 5% 1/6W	R449	1-215-744-91	METAL	1.8K 5% 1/6W
R271	1-215-734-91	METAL	680 5% 1/6W	R450	1-215-744-91	METAL	1.8K 5% 1/6W
				R451	1-215-744-91	METAL	1.8K 5% 1/6W
R272	1-215-734-91	METAL	680 5% 1/6W	R452	1-215-744-91	METAL	1.8K 5% 1/6W
R273	1-215-730-91	METAL	470 5% 1/6W	R454	1-215-714-91	METAL	100 5% 1/6W
R274	1-215-730-91	METAL	470 5% 1/6W				
R275	1-215-746-91	METAL	2.2K 5% 1/6W	R455	1-215-714-91	METAL	100 5% 1/6W
R278	1-249-393-11	CARBON	10 5% 1/6W F	R456	1-215-714-91	METAL	100 5% 1/6W
				R457	1-215-738-91	METAL	1K 5% 1/6W
R279	1-249-393-11	CARBON	10 5% 1/6W F	R458	1-215-738-91	METAL	1K 5% 1/6W
R280	1-215-786-91	METAL	100K 5% 1/6W	R459	1-215-738-91	METAL	1K 5% 1/6W
R281	1-215-762-91	METAL	10K 5% 1/6W				
R284	1-247-700-11	CARBON	100 5% 1/4W F	R460	1-215-738-91	METAL	1K 5% 1/6W
R285	1-215-762-91	METAL	10K 5% 1/6W	R461	1-215-732-91	METAL	560 5% 1/6W
				R464	1-215-152-00	METAL	1K 5% 1/4W
R287	1-215-786-91	METAL	100K 5% 1/6W	R465	1-247-711-11	CARBON	680 5% 1/4W F
R288	1-215-202-00	METAL	120K 5% 1/4W	R466	1-215-730-91	METAL	470 5% 1/6W
R289	1-215-778-91	METAL	47K 5% 1/6W				
R401	1-215-750-91	METAL	3.3K 5% 1/6W	R467	1-215-730-91	METAL	470 5% 1/6W
R402	1-215-762-91	METAL	10K 5% 1/6W	R468	1-247-232-00	CARBON	470 5% 1/2W
				R469	1-215-730-91	METAL	470 5% 1/6W
R403	1-215-762-91	METAL	10K 5% 1/6W	R501	1-215-722-91	METAL	220 5% 1/6W
R404	1-215-752-91	METAL	3.9K 5% 1/6W	R502	1-215-748-91	METAL	2.7K 5% 1/6W
R405	1-215-730-91	METAL	470 5% 1/6W				
R406	1-215-730-91	METAL	470 5% 1/6W	R503	1-215-730-91	METAL	470 5% 1/6W
R408	1-215-732-91	METAL	560 5% 1/6W	R504	1-215-180-00	METAL	15K 5% 1/4W
				R505	1-215-754-91	METAL	4.7K 5% 1/6W
R409	1-215-762-91	METAL	10K 5% 1/6W	R506	1-215-750-91	METAL	3.3K 5% 1/6W
R410	1-215-216-81	METAL	470K 5% 1/4W	R507	1-215-752-91	METAL	3.9K 5% 1/6W
R411	1-215-810-91	METAL	1M 5% 1/6W				
R412	1-215-784-91	METAL	82K 5% 1/6W	R508	1-215-756-91	METAL	5.6K 5% 1/6W
R413	1-215-798-91	METAL	330K 5% 1/6W	R509	1-215-722-91	METAL	220 5% 1/6W
				R510	1-216-464-11	METAL OXIDE	18K 5% 2W F
R414	1-215-772-91	METAL	27K 5% 1/6W	R511	1-214-763-00	METAL	27K 1% 1/4W
R415	1-215-792-91	METAL	180K 5% 1/6W	R513	1-215-790-91	METAL	150K 5% 1/6W
R416	1-215-770-91	METAL	22K 5% 1/6W				
R417	1-215-786-91	METAL	100K 5% 1/6W	R516	1-215-190-00	METAL	39K 5% 1/4W
R418	1-215-734-91	METAL	680 5% 1/6W	R517	1-215-746-91	METAL	2.2K 5% 1/6W
				R519	1-215-128-00	METAL	100 5% 1/4W
R419	1-215-206-81	METAL	180K 5% 1/4W	R522	1-215-764-91	METAL	12K 5% 1/6W
R420	1-215-778-91	METAL	47K 5% 1/6W	R523	1-215-738-91	METAL	1K 5% 1/6W
R421	1-215-778-91	METAL	47K 5% 1/6W				
R422	1-215-154-00	METAL	1.2K 5% 1/4W	R525	1-202-463-00	SOL ID	2.2M 5% 1/4W
R423	1-215-710-91	METAL	68 5% 1/6W	R526	1-202-463-00	SOL ID	2.2M 5% 1/4W
				R527	1-215-714-91	METAL	100 5% 1/6W
R424	1-215-463-00	METAL	56K 1% 1/6W				
R425	1-215-756-91	METAL	5.6K 5% 1/6W				
R426	1-215-714-91	METAL	100 5% 1/6W				
R427	1-215-128-00	METAL	100 5% 1/4W				
R428	1-215-764-91	METAL	12K 5% 1/6W				

D D2

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
R528	1-215-714-91	METAL	100 5% 1/6W	R809	1-202-826-00	SOLID 4.7K 10% 1/2W	
R529	1-215-740-91	METAL	1.2K 5% 1/6W	R810	1-202-824-00	SOLID 3.3K 10% 1/2W	
R530	1-215-728-91	METAL	390 5% 1/6W	R811	1-217-430-00	FUSIBLE 4.7 5% 1/2W F	
R531	1-215-770-91	METAL	22K 5% 1/6W	R812	1-249-448-11	CARBON 1.2 5% 1/4W F	
R532	1-215-748-91	METAL	2.7K 5% 1/6W	R813	1-217-430-00	FUSIBLE 4.7 5% 1/2W F	
R533	1-215-164-00	METAL	3.3K 5% 1/4W	R814	1-244-925-00	CARBON 150K 5% 1/2W	
R534	1-215-469-00	METAL	100K 1% 1/6W	R815	1-215-884-11	METAL OXIDE 47 5% 2W F	
R535	1-215-198-00	METAL	82K 5% 1/4W	R816	1-215-870-11	METAL OXIDE 1.5K 5% 1W F	
R536	1-215-738-91	METAL	1K 5% 1/6W	R817	1-207-678-00	WIREWOUND 10 10% 5W F	
R537	1-215-758-91	METAL	6.8K 5% 1/6W	R818	1-207-678-00	WIREWOUND 10 10% 5W F	
R538	1-215-712-91	METAL	82 5% 1/6W	R819	1-215-202-00	METAL 120K 5% 1/4W	
R539	1-215-481-00	METAL	330K 1% 1/6W	R820	1-215-710-91	METAL 68 5% 1/6W	
R540	1-215-744-91	METAL	1.8K 5% 1/6W	R821	1-215-158-00	METAL 1.8K 5% 1/4W	
R541	1-215-786-91	METAL	100K 5% 1/6W	R822	1-247-749-11	CARBON 560 5% 1/2W F	
R542	1-215-212-00	METAL	330K 5% 1/4W	R823	1-216-345-11	METAL OXIDE 0.47 5% 1W F	
R543	1-210-825-00	SOLID	3.3M 5% 1/4W	R825	1-216-348-00	METAL OXIDE 0.82 5% 1W F	
R544	1-210-825-00	SOLID	3.3M 5% 1/4W	VARIABLE RESISTOR			
R546	1-215-200-00	METAL	100K 5% 1/4W	RV401	1-230-630-11	RES, ADJ, CARBON 10K	
R549	1-215-738-91	METAL	1K 5% 1/6W	RV402	1-230-630-11	RES, ADJ, CARBON 10K	
R552	1-215-738-91	METAL	1K 5% 1/6W	RV501	1-226-703-00	RES, ADJ, METAL GLAZE 10K	
R560	1-247-700-11	CARBON	100 5% 1/4W F	RV502	1-226-776-00	RES, ADJ, METAL GLAZE 220K	
R561	1-215-182-00	METAL	18K 5% 1/4W	RV503	1-226-775-00	RES, ADJ, METAL GLAZE 100K	
R562	1-215-869-11	METAL OXIDE	1K 5% 1W F	RV560	1-230-271-00	RES, ADJ, CARBON 4.7K	
R563	1-247-690-11	CARBON	15 5% 1/4W F	RV801	1-230-271-00	RES, ADJ, CARBON 4.7K	
R564	1-216-350-11	METAL OXIDE	1.2 5% 1W F	SPARK GAP			
R566	1-216-350-11	METAL OXIDE	1.2 5% 1W F	SG801	1-519-063-XX	DISCHARGING GAP	
R567	1-249-405-11	CARBON	100 5% 1/6W F	TRANSFORMER			
R568	1-215-746-91	METAL	2.2K 5% 1/6W	T801	1-437-090-00	HDT	
R569	1-249-393-11	CARBON	10 5% 1/6W F	THERMISTOR			
R570	1-215-148-00	METAL	680 5% 1/4W	TH560	1-806-213-00	THERMISTOR	
R571	1-215-479-00	METAL	270K 1% 1/6W	*****			
R572	1-215-766-91	METAL	15K 5% 1/6W	*A-1345-612-A D2 BOARD, COMPLETE			
R573	1-215-726-91	METAL	330 5% 1/6W	*****			
R574	1-215-694-91	METAL	15 5% 1/6W	FILTER			
R575	1-215-164-00	METAL	3.3K 5% 1/4W	BPF301	1-235-835-11	FILTER, BAND PASS	
R576	1-215-104-81	METAL	10 5% 1/4W	CAPACITOR			
R577	1-216-354-11	METAL OXIDE	2.7 5% 1W F	C301	1-102-980-00	CERAMIC 270PF 5% 50V	
R580	1-249-399-11	CARBON	33 5% 1/6W F	C302	1-102-980-00	CERAMIC 270PF 5% 50V	
R583	1-215-872-11	METAL OXIDE	3.3K 5% 1W F	C303	1-102-525-00	CERAMIC 68PF 5% 50V	
R584	1-215-152-00	METAL	1K 5% 1/4W	C304	1-102-735-00	CERAMIC 120PF 5% 50V	
R585	1-249-382-11	CARBON	1.2 5% 1/6W F	C305	1-102-514-00	CERAMIC 22PF 5% 50V	
R586	1-249-382-11	CARBON	1.2 5% 1/6W F	C306	1-102-514-00	CERAMIC 22PF 5% 50V	
R587	1-216-458-11	METAL OXIDE	1.8K 5% 2W F	C307	1-102-735-00	CERAMIC 120PF 5% 50V	
R588	1-215-790-91	METAL	150K 5% 1/6W	C308	1-102-525-00	CERAMIC 68PF 5% 50V	
R589	1-215-762-91	METAL	10K 5% 1/6W				
R801	1-247-270-00	CARBON	18K 5% 1/2W				
R802	1-249-448-51	CARBON	1.2 5% 1/4W F				
R803	1-215-883-51	METAL OXIDE	33 5% 2W F				
R804	1-216-378-11	METAL OXIDE	5.6 5% 2W F				
R805	1-249-448-51	CARBON	1.2 5% 1/4W F				
R806	1-215-216-81	METAL	470K 5% 1/4W				
R807	1-215-869-51	METAL OXIDE	1K 5% 1W F				
R808	1-202-845-00	SOLID	390K 10% 1/2W				

The components identified by shading and mark **A** are critical for safety. Replace only with part number specified.

D2

—36—

D2

J1

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
TRANSFORMER				C1238	1-110-186-81	MYLAR	0.0047MF 10% 400V
T301	1-404-584-11	COIL		C1239	1-110-186-81	MYLAR	0.0047MF 10% 400V
THERMISTOR				C1240	1-110-182-81	MYLAR	0.022MF 10% 250V
TH301	1-800-644-00	THERMISTER		C1241	1-110-182-81	MYLAR	0.022MF 10% 250V
CRYSTAL				C1242	1-123-380-00	ELECT	1MF 20% 50V
X301	1-567-131-00	OSCILLATOR, CRYSTAL		C1250	1-123-332-00	ELECT	47MF 20% 16V
*****				C1251	1-102-976-00	CERAMIC	180PF 5% 50V
*A-1371-170-A J1 BOARD, COMPLETE				C1252	1-123-307-00	ELECT	100MF 20% 10V
*****				C1253	1-123-307-00	ELECT	100MF 20% 10V
CAPACITOR				C1254	1-102-976-00	CERAMIC	180PF 5% 50V
C1201	1-123-379-00	ELECT	0.47MF 20% 50V	C1255	1-123-332-00	ELECT	47MF 20% 16V
C1202	1-102-824-21	CERAMIC	470PF 5% 50V	C1256	1-110-171-81	MYLAR	0.047MF 10% 100V
C1203	1-102-824-21	CERAMIC	470PF 5% 50V	C1257	1-123-332-00	ELECT	47MF 20% 16V
C1204	1-123-332-00	ELECT	47MF 20% 16V	C1258	1-123-332-00	ELECT	47MF 20% 16V
C1205	1-123-332-00	ELECT	47MF 20% 16V	C1259	1-123-333-00	ELECT	100MF 20% 16V
C1206	1-123-379-00	ELECT	0.47MF 20% 50V	C1260	1-110-182-81	MYLAR	0.022MF 10% 250V
C1207	1-102-824-21	CERAMIC	470PF 5% 50V	C1261	1-110-182-81	MYLAR	0.022MF 10% 250V
C1208	1-102-824-21	CERAMIC	470PF 5% 50V	CONNECTOR			
C1209	1-123-330-00	ELECT	22MF 20% 16V	CN1201	1-561-534-41	SOCKET 21P	
C1210	1-123-380-00	ELECT	1MF 20% 50V	CN1202	1-561-534-41	SOCKET 21P	
C1211	1-123-330-00	ELECT	22MF 20% 16V	CN1203	1-536-996-11	TERMINAL BOARD, INPUT/OUTPUT	
C1212	1-123-380-00	ELECT	1MF 20% 50V	J1	*1-564-899-31	PLUG, CONNECTOR 10P	
C1213	1-102-824-21	CERAMIC	470PF 5% 50V	J2	*1-564-897-11	PLUG, CONNECTOR 8P	
C1214	1-123-380-00	ELECT	1MF 20% 50V	J3	*1-564-895-21	PLUG, CONNECTOR 6P	
C1215	1-102-074-00	CERAMIC	0.001MF 10% 50V	J4	*1-564-891-11	PLUG, CONNECTOR 2P	
C1216	1-102-824-21	CERAMIC	470PF 5% 50V	J5	*1-564-891-11	PLUG, CONNECTOR 2P	
C1217	1-123-380-00	ELECT	1MF 20% 50V	J6	*1-564-895-21	PLUG, CONNECTOR 6P	
C1218	1-102-074-00	CERAMIC	0.001MF 10% 50V	J7	*1-564-894-11	PLUG, CONNECTOR 5P	
C1219	1-123-307-00	ELECT	100MF 20% 10V	J8	*1-564-895-21	PLUG, CONNECTOR 6P	
C1220	1-123-307-00	ELECT	100MF 20% 10V	DIODE			
C1221	1-123-307-00	ELECT	100MF 20% 10V	D1201	8-719-102-81	DIODE RD7.5E-N2	
C1222	1-110-171-81	MYLAR	0.047MF 10% 100V	D1202	8-719-102-81	DIODE RD7.5E-N2	
C1223	1-110-171-81	MYLAR	0.047MF 10% 100V	D1203	8-719-102-81	DIODE RD7.5E-N2	
C1224	1-108-614-91	MYLAR	0.001MF 10% 100V	D1204	8-719-102-81	DIODE RD7.5E-N2	
C1225	1-123-321-00	ELECT	220MF 20% 16V	D1205	8-719-102-81	DIODE RD7.5E-N2	
C1226	1-123-332-00	ELECT	47MF 20% 16V	D1206	8-719-102-81	DIODE RD7.5E-N2	
C1227	1-123-307-00	ELECT	100MF 20% 10V	D1207	8-719-000-12	DIODE MC931	
C1228	1-110-171-81	MYLAR	0.047MF 10% 100V	D1208	8-719-000-12	DIODE MC931	
C1229	1-108-614-91	MYLAR	0.001MF 10% 100V	D1209	8-719-815-55	DIODE 1S1555	
C1230	1-123-380-00	ELECT	1MF 20% 50V	D1210	8-719-000-12	DIODE MC931	
C1231	1-123-333-00	ELECT	100MF 20% 16V	D1211	8-719-000-12	DIODE MC931	
C1232	1-110-184-81	MYLAR	0.033MF 10% 250V	D1212	8-719-000-12	DIODE MC931	
C1233	1-123-379-00	ELECT	0.47MF 20% 50V	D1213	8-719-102-81	DIODE RD7.5E-N2	
C1234	1-123-379-00	ELECT	0.47MF 20% 50V	D1214	8-719-102-81	DIODE RD7.5E-N2	
C1235	1-123-381-00	ELECT	2.2MF 20% 50V	D1215	8-719-000-06	DIODE MC921	
C1236	1-110-186-81	MYLAR	0.0047MF 10% 400V	D1216	8-719-911-19	DIODE 1SS119	
C1237	1-123-381-00	ELECT	2.2MF 20% 50V	D1217	8-719-911-19	DIODE 1SS119	
				D1218	8-719-911-19	DIODE 1SS119	
				D1219	8-719-911-19	DIODE 1SS119	
				D1220	8-719-815-55	DIODE 1S1555	

J1

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
D1221	8-719-102-97	DIODE RD12E-N2		R1215	1-215-772-91	METAL 27K 5% 1/6W	
D1222	8-719-102-97	DIODE RD12E-N2		R1216	1-215-770-91	METAL 22K 5% 1/6W	
D1223	8-719-911-19	DIODE 1SS119		R1217	1-215-736-91	METAL 820 5% 1/6W	
D1224	8-719-911-19	DIODE 1SS119		R1218	1-215-772-91	METAL 27K 5% 1/6W	
D1225	8-719-815-55	DIODE 1S1555		R1219	1-215-184-00	METAL 22K 5% 1/4W	
<u>IC</u>				R1220	1-215-778-91	METAL 47K 5% 1/6W	
IC1201	8-759-914-76	IC CX20199		R1221	1-215-778-91	METAL 47K 5% 1/6W	
IC1202	8-759-145-58	IC UPC4558C		R1222	1-215-772-91	METAL 27K 5% 1/6W	
<u>COIL</u>				R1223	1-215-772-91	METAL 27K 5% 1/6W	
L1201	1-459-407-00	COIL, FERRITE CHOKE		R1224	1-215-712-91	METAL 82 5% 1/6W	
L1202	1-459-407-00	COIL, FERRITE CHOKE		R1225	1-215-128-00	METAL 100 5% 1/4W	
<u>TRANSISTOR</u>				R1226	1-215-712-91	METAL 82 5% 1/6W	
Q1203	8-729-117-54	TRANSISTOR 2SA1175		R1227	1-215-714-91	METAL 100 5% 1/6W	
Q1204	8-729-178-54	TRANSISTOR 2SC2785		R1230	1-215-714-91	METAL 100 5% 1/6W	
Q1205	8-729-117-54	TRANSISTOR 2SA1175		R1231	1-215-394-00	METAL 75 1% 1/6W	
Q1206	8-729-117-54	TRANSISTOR 2SA1175		R1232	1-215-762-91	METAL 10K 5% 1/6W	
Q1207	8-729-900-65	TRANSISTOR DTA144ES		R1233	1-215-762-91	METAL 10K 5% 1/6W	
Q1208	8-729-178-54	TRANSISTOR 2SC2785		R1234	1-215-772-91	METAL 27K 5% 1/6W	
Q1209	8-729-117-54	TRANSISTOR 2SA1175		R1235	1-215-772-91	METAL 27K 5% 1/6W	
Q1210	8-729-117-54	TRANSISTOR 2SA1175		R1236	1-215-128-00	METAL 100 5% 1/4W	
Q1211	8-729-178-54	TRANSISTOR 2SC2785		R1237	1-215-176-00	METAL 10K 5% 1/4W	
Q1212	8-729-178-54	TRANSISTOR 2SC2785		R1238	1-215-176-00	METAL 10K 5% 1/4W	
Q1213	8-729-900-89	TRANSISTOR DTC144ES		R1239	1-215-176-00	METAL 10K 5% 1/4W	
Q1214	8-729-900-89	TRANSISTOR DTC144ES		R1240	1-247-700-11	CARBON 100 5% 1/4W	F
Q1215	8-729-117-54	TRANSISTOR 2SA1175		R1241	1-215-168-00	METAL 4.7K 5% 1/4W	
Q1216	8-729-117-54	TRANSISTOR 2SA1175		R1242	1-215-754-91	METAL 4.7K 5% 1/6W	
Q1217	8-729-178-54	TRANSISTOR 2SC2785		R1243	1-215-738-91	METAL 1K 5% 1/6W	
Q1218	8-729-178-54	TRANSISTOR 2SC2785		R1244	1-215-742-91	METAL 1.5K 5% 1/6W	
Q1219	8-729-900-89	TRANSISTOR DTC144ES		R1245	1-215-810-91	METAL 1M 5% 1/6W	
Q1220	8-729-900-89	TRANSISTOR DTC144ES		R1246	1-215-762-91	METAL 10K 5% 1/6W	
Q1221	8-729-117-54	TRANSISTOR 2SA1175		R1247	1-215-742-91	METAL 1.5K 5% 1/6W	
Q1222	8-729-900-36	TRANSISTOR DTC124ES		R1248	1-215-738-91	METAL 1K 5% 1/6W	
Q1223	8-729-178-54	TRANSISTOR 2SC2785		R1249	1-215-778-91	METAL 47K 5% 1/6W	
Q1224	8-729-178-54	TRANSISTOR 2SC2785		R1250	1-215-762-91	METAL 10K 5% 1/6W	
<u>RESISTOR</u>				R1251	1-215-168-00	METAL 4.7K 5% 1/4W	
R1201	1-215-802-91	METAL 470K 5% 1/6W		R1252	1-215-778-91	METAL 47K 5% 1/6W	
R1202	1-215-186-00	METAL 27K 5% 1/4W		R1253	1-215-778-91	METAL 47K 5% 1/6W	
R1203	1-215-778-91	METAL 47K 5% 1/6W		R1254	1-247-698-11	CARBON 68 5% 1/4W	F
R1204	1-215-730-91	METAL 470 5% 1/6W		R1255	1-215-702-91	METAL 33 5% 1/6W	
R1205	1-215-778-91	METAL 47K 5% 1/6W		R1256	1-215-754-91	METAL 4.7K 5% 1/6W	
R1206	1-215-730-91	METAL 470 5% 1/6W		R1257	1-215-754-91	METAL 4.7K 5% 1/6W	
R1207	1-215-762-91	METAL 10K 5% 1/6W		R1258	1-215-750-91	METAL 3.3K 5% 1/6W	
R1208	1-215-762-91	METAL 10K 5% 1/6W		R1259	1-215-750-91	METAL 3.3K 5% 1/6W	
R1209	1-215-712-91	METAL 82 5% 1/6W		R1260	1-247-698-11	CARBON 68 5% 1/4W	F
R1210	1-215-712-91	METAL 82 5% 1/6W		R1261	1-215-394-00	METAL 75 1% 1/6W	
R1211	1-215-802-91	METAL 470K 5% 1/6W		R1262	1-215-738-91	METAL 1K 5% 1/6W	
R1212	1-215-772-91	METAL 27K 5% 1/6W		R1263	1-215-752-91	METAL 3.9K 5% 1/6W	
R1213	1-215-712-91	METAL 82 5% 1/6W		R1264	1-215-760-91	METAL 8.2K 5% 1/6W	
R1214	1-215-736-91	METAL 820 5% 1/6W		R1265	1-215-760-91	METAL 8.2K 5% 1/6W	
				R1266	1-215-752-91	METAL 3.9K 5% 1/6W	
				R1267	1-215-394-00	METAL 75 1% 1/6W	
				R1268	1-215-702-91	METAL 33 5% 1/6W	
				R1269	1-215-750-91	METAL 3.3K 5% 1/6W	

J1

H1

H2

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
R1270	1-215-774-91	METAL	33K 5% 1/6W	S1402	1-554-804-11	SWITCH, PUSH (1 KEY)	
R1271	1-215-774-91	METAL	33K 5% 1/6W	S1403	1-554-804-11	SWITCH, PUSH (1 KEY)	
R1272	1-215-750-91	METAL	3.3K 5% 1/6W	S1404	1-554-804-11	SWITCH, PUSH (1 KEY)	
R1273	1-215-732-91	METAL	560 5% 1/6W	S1405	1-554-804-11	SWITCH, PUSH (1 KEY)	
R1274	1-247-698-11	CARBON	68 5% 1/4W	S1406	1-554-804-11	SWITCH, PUSH (1 KEY)	
R1275	1-215-750-91	METAL	3.3K 5% 1/6W	S1407	1-554-804-11	SWITCH, PUSH (1 KEY)	
R1276	1-215-752-91	METAL	3.9K 5% 1/6W	S1408	1-554-804-11	SWITCH, PUSH (1 KEY)	
R1277	1-215-104-81	METAL	10 5% 1/4W	S1409	1-554-804-11	SWITCH, PUSH (1 KEY)	
R1278	1-215-762-91	METAL	10K 5% 1/6W	S1411	1-554-804-11	SWITCH, PUSH (1 KEY)	
R1279	1-215-144-00	METAL	470 5% 1/4W	S1413	1-554-824-11	SWITCH, PUSH (1 KEY)	
R1280	1-215-754-91	METAL	4.7K 5% 1/6W	*****			
R1281	1-215-754-91	METAL	4.7K 5% 1/6W				
R1282	1-215-762-91	METAL	10K 5% 1/6W				
R1283	1-215-786-91	METAL	100K 5% 1/6W				
R1284	1-215-168-00	METAL	4.7K 5% 1/4W				
R1285	1-215-730-91	METAL	470 5% 1/6W				
R1286	1-215-730-91	METAL	470 5% 1/6W				

*1-617-747-11 H1 BOARD							

CAPACITOR							
C1401	1-123-356-00	ELECT	10MF 20% 16V				
CONNECTOR							
CN1401	1-507-806-00	JACK					
H1	*1-564-886-11	PLUG, CONNECTOR 9P					
H2	*1-564-887-11	PLUG, CONNECTOR 10P					
H3	*1-564-883-11	PLUG, CONNECTOR 6P					
DIODE							
D1401	8-719-812-41	DIODE TLR124					
	*4-380-621-01	HOLDER (B), LED; D1401					
RESISTOR							
R1401	1-215-776-91	METAL	39K 5% 1/6W				
R1402	1-215-770-91	METAL	22K 5% 1/6W				
R1406	1-215-144-00	METAL	470 5% 1/4W				
R1407	1-215-144-00	METAL	470 5% 1/4W				
R1408	1-215-754-91	METAL	4.7K 5% 1/6W				
R1409	1-215-746-91	METAL	2.2K 5% 1/6W				
VARIABLE RESISTOR							
RV1401	1-230-916-11	RES, VAR, CARBON 10K					
RV1402	1-230-916-11	RES, VAR, CARBON 10K					
RV1403	1-230-916-11	RES, VAR, CARBON 10K					
RV1405	1-230-916-11	RES, VAR, CARBON 10K					
RV1406	1-230-916-11	RES, VAR, CARBON 10K					
SWITCH							
S1401	1-554-804-11	SWITCH, PUSH (1 KEY)					

Ref.No.	Part No.	Description	Remark
S1402	1-554-804-11	SWITCH, PUSH (1 KEY)	
S1403	1-554-804-11	SWITCH, PUSH (1 KEY)	
S1404	1-554-804-11	SWITCH, PUSH (1 KEY)	
S1405	1-554-804-11	SWITCH, PUSH (1 KEY)	
S1406	1-554-804-11	SWITCH, PUSH (1 KEY)	
S1407	1-554-804-11	SWITCH, PUSH (1 KEY)	
S1408	1-554-804-11	SWITCH, PUSH (1 KEY)	
S1409	1-554-804-11	SWITCH, PUSH (1 KEY)	
S1411	1-554-804-11	SWITCH, PUSH (1 KEY)	
S1413	1-554-824-11	SWITCH, PUSH (1 KEY)	

	*1-617-746-11	H2 BOARD	

DIODE			
D01	8-719-800-94	DIODE TLR144	
	*4-380-613-01	HOLDER (A), LED; D01	
D02	8-719-812-41	DIODE TLR124	
	*4-337-478-00	HOLDER (F), LED; D02	
D03	8-719-812-41	DIODE TLR124	
	*4-337-478-00	HOLDER (F), LED; D03	
D04	8-719-812-41	DIODE TLR124	
	*4-337-478-00	HOLDER (F), LED; D04	
D05	8-719-812-41	DIODE TLR124	
	*4-337-478-00	HOLDER (F), LED; D05	
D06	8-719-911-19	DIODE 1SS119	
D07	8-719-911-19	DIODE 1SS119	
IC			
IC01	8-741-138-70	IC BX1387	

MISCELLANEOUS			


L901	*1-426-280-11	COIL, DEMAGNETIZATION	
	*1-451-290-11	DEFLECTION YOKE (SY-153F)	
	1-452-032-00	MAGNET, DISK; 10MM Ø	
	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM Ø	
	1-452-277-00	MAGNET, BMC	
	1-503-642-11	SPEAKER	
	*1-551-270-31	CORD, POWER	
	*1-554-762-21	SWITCH, PUSH (AC POWER)(1 KEY)	
	*1-558-539-11	CABLE, P-P	
	*1-563-204-11	SOCKET, ANTENNA (PAL/SECAM)	
RV901	*1-237-286-11	RESISTOR ASSY, HIGH-VOLTAGE	
T802	*1-439-387-21	TRANSFORMER ASSY, FLYBACK	
V901	*8-736-954-05	CRT (A51JKQ60X)	


ACCESSORIES AND PACKING MATERIALS

<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
A-1470-744-A	COMMANDER ASSY (RM-664)	
4-377-015-01	BAG, PROTECTION	
*4-380-602-01	CUSHION (UPPER) (ASSY)	
*4-380-603-01	CUSHION (LOWER) (ASSY)	
*4-380-604-01	INDIVIDUAL CARTON	
4-482-253-71	MANUAL, INSTRUCTION	









KV-21XRD
Chassis No. SCC-784A-A
KV-21XRTD
Chassis No. SCC-784C-A
SX CHASSIS

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARK  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

Note: The components identified by shading and mark  are critical for safety. Replace only with part number specified.

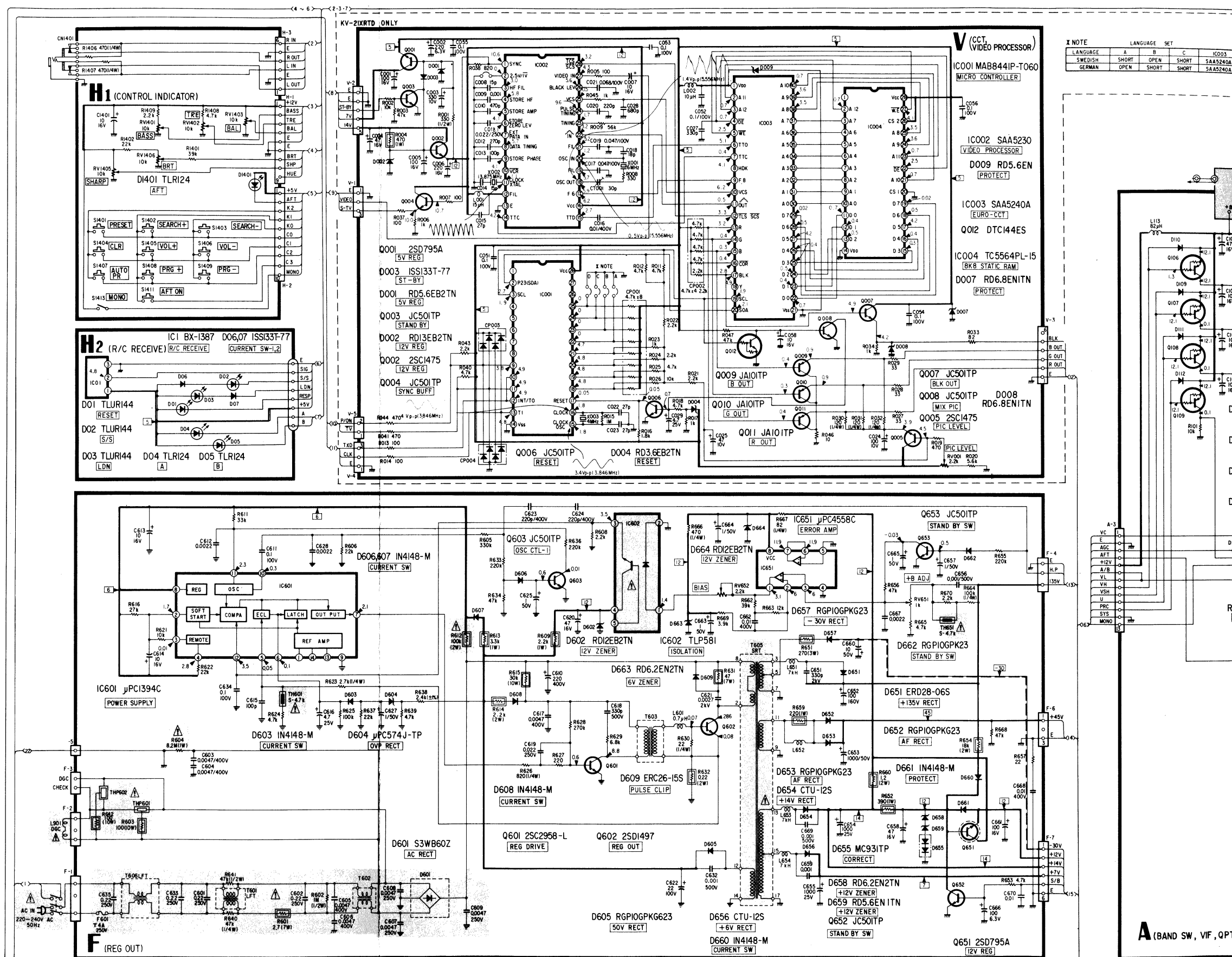
Note:

- All capacitors are in μF unless otherwise noted. pF : μF 50WV or less are not indicated except for electrolytics.
- All resistors are in ohms, 1/6W unless otherwise noted. k: 1000 Ω ; M : 1000k Ω
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
-  : nonflammable resistor.
-  : fusible resistor.
-  : internal component.
-  : panel designation.
-  : adjustment for repair.
- All voltage are in V.
-  : B + bus.
-  : B - bus.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken with a 10M Ω digital multimeter.
- Readings are taken with a color-bar signal input.
- Voltage variations may be noted due to normal production tolerances.
-  : signal path.

CIRCUIT BOARDS LOCATION

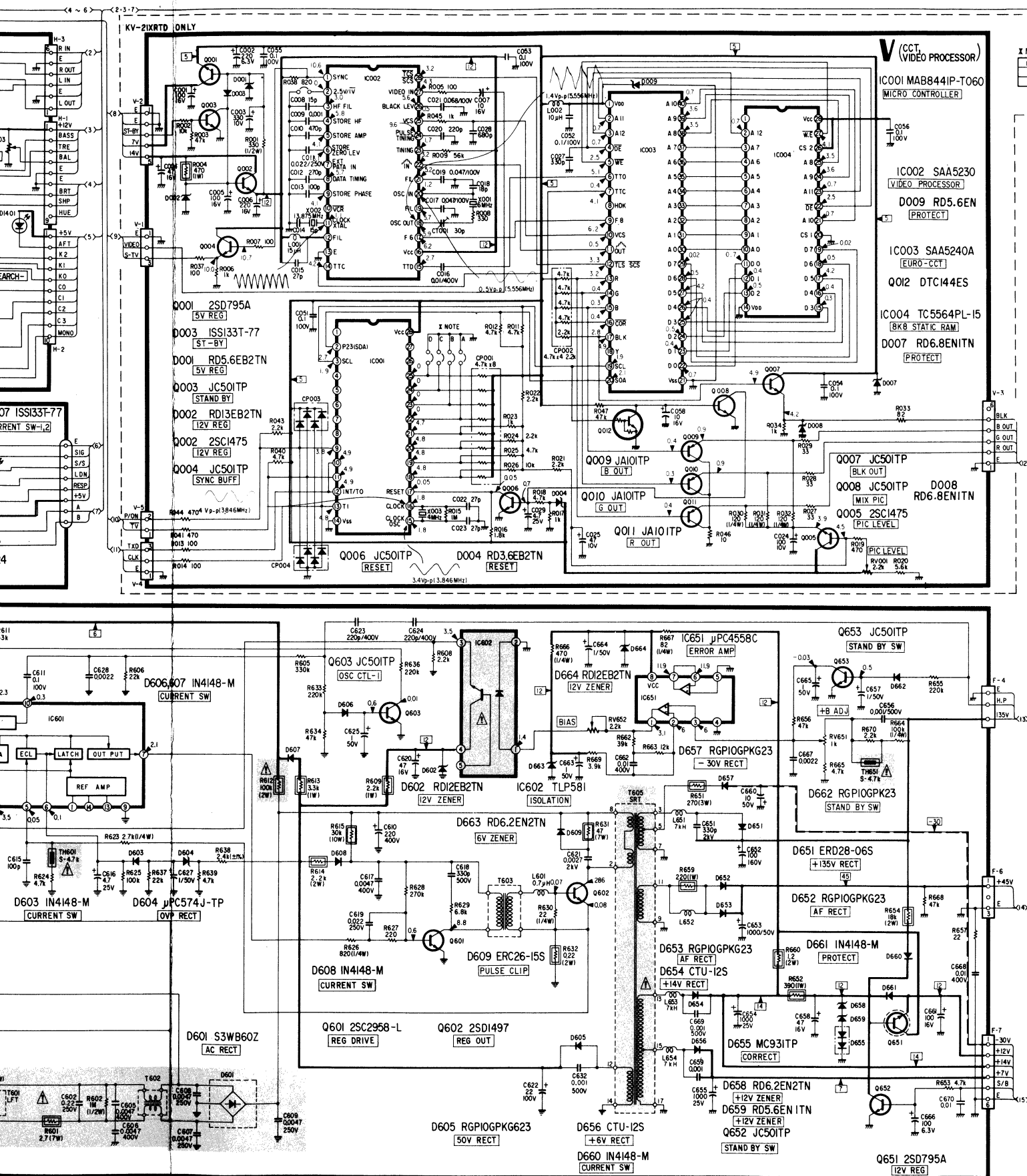
SCHEMATIC DIAGRAM

THIS SCHEMATIC DIAGRAM IS KV-21XRTD.
V BOARD IS NOT USE KV21XRD.

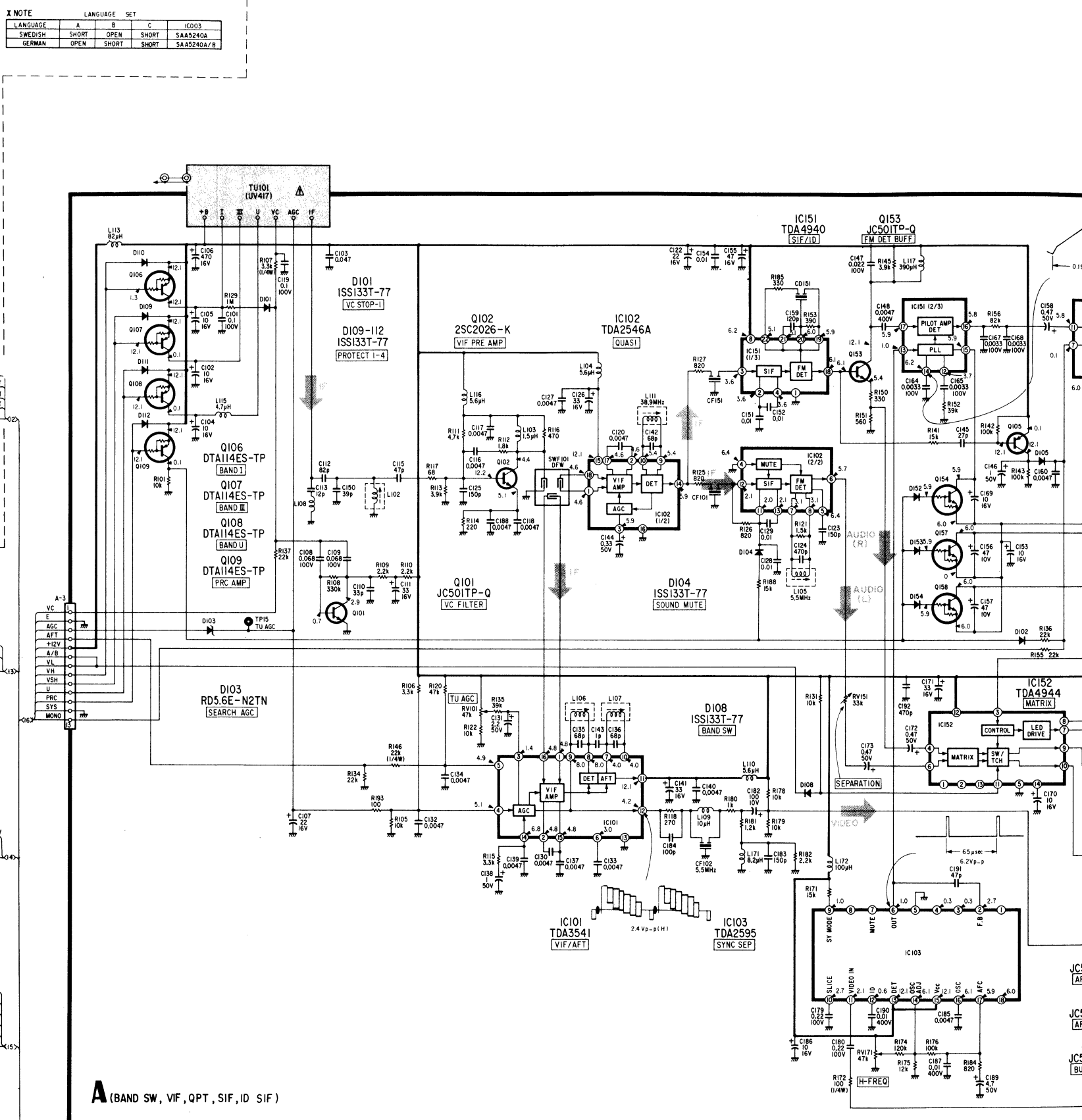


A (BAND SW, VIF, QPT)

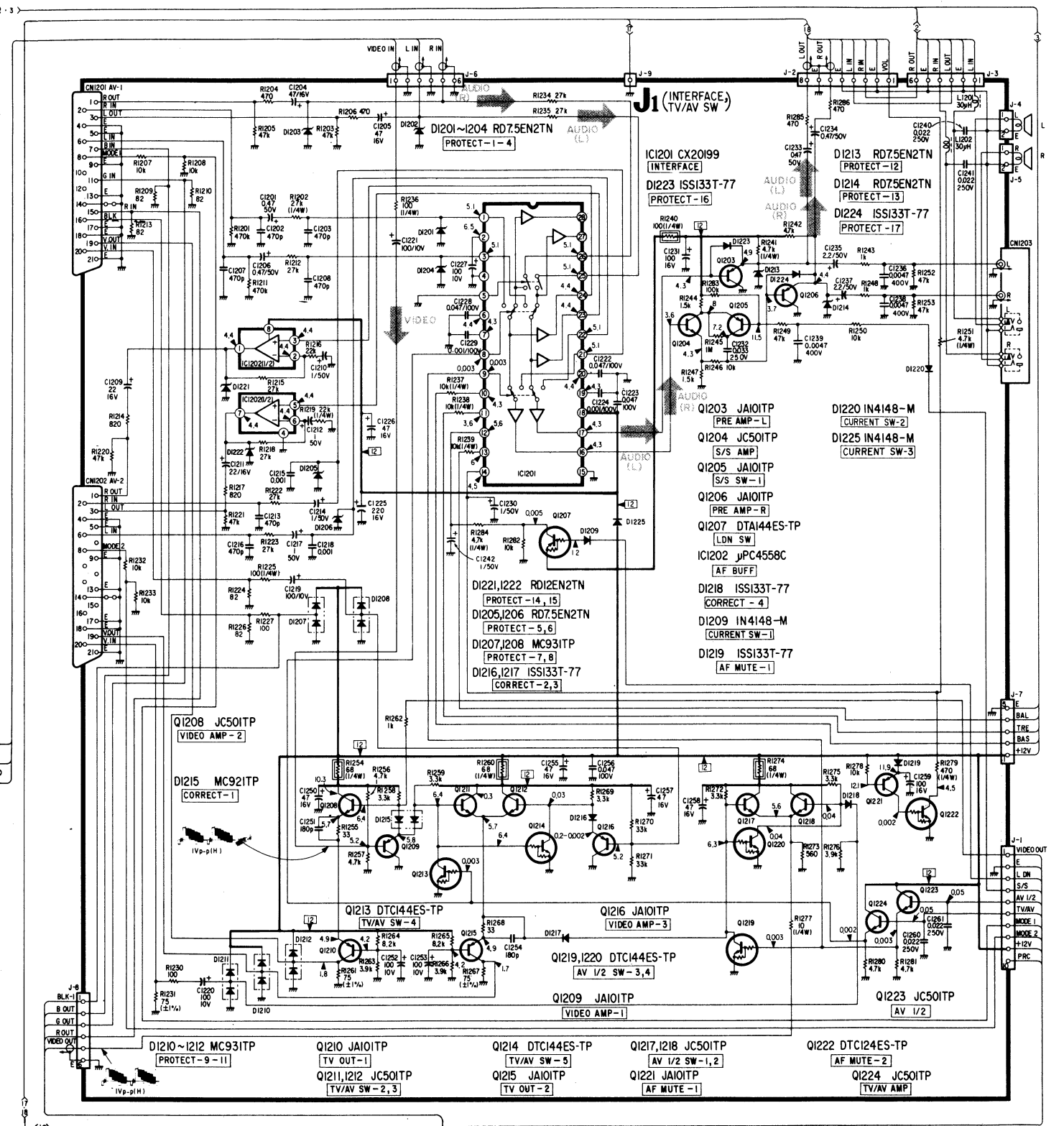
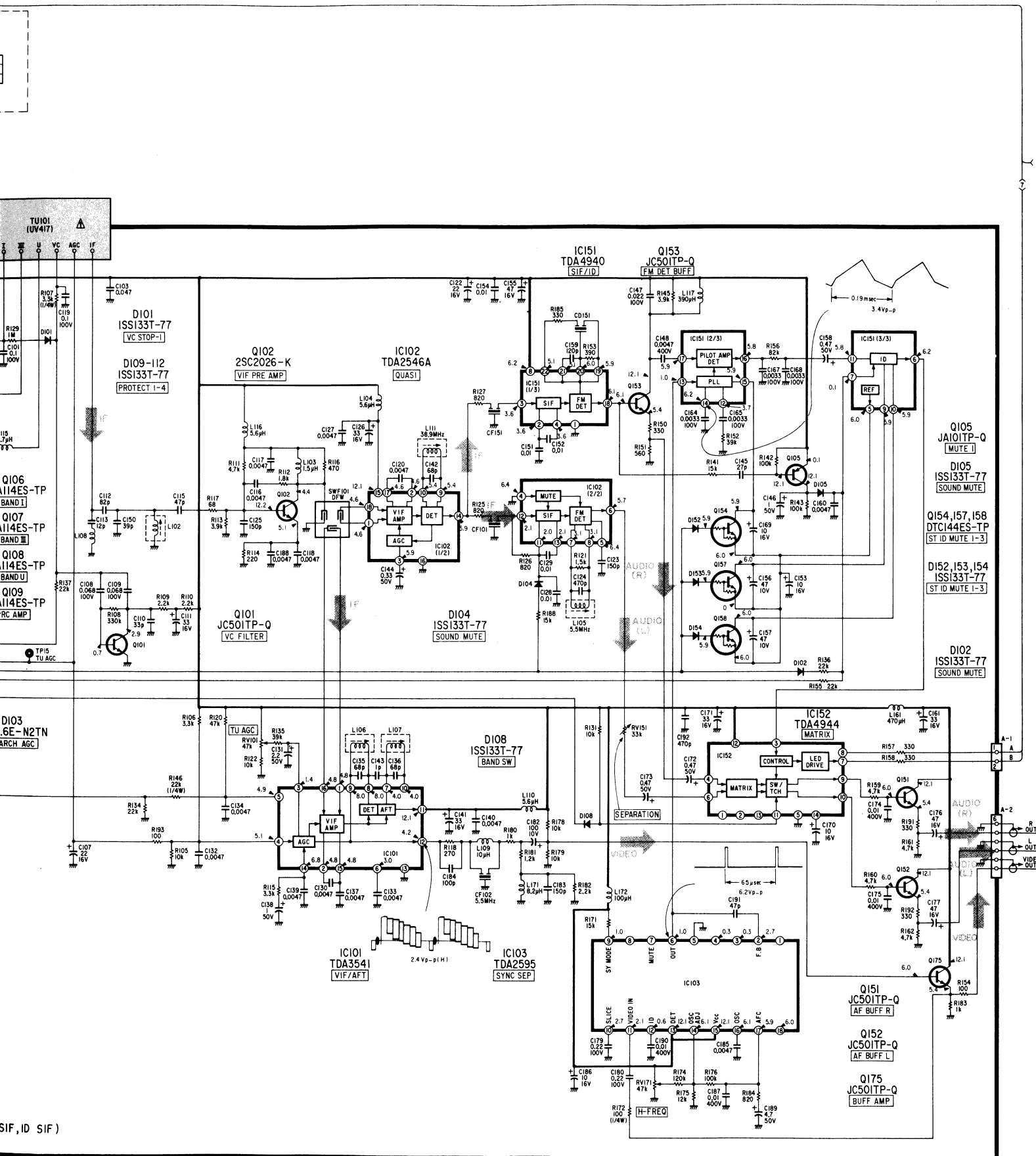
**THIS SCHEMATIC DIAGRAM IS KV-21XRTD.
V BOARD IS NOT USE KV21XRD.**

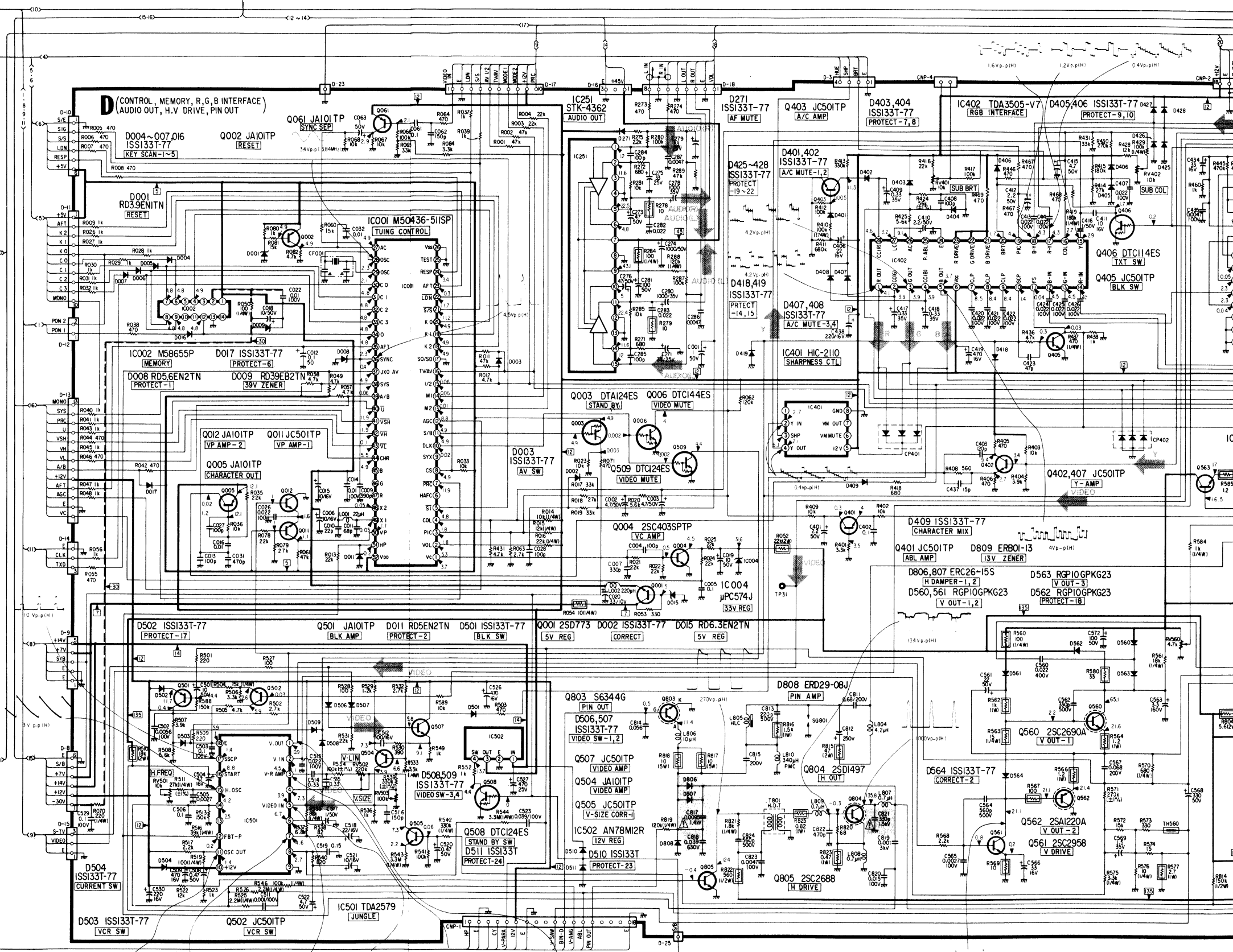
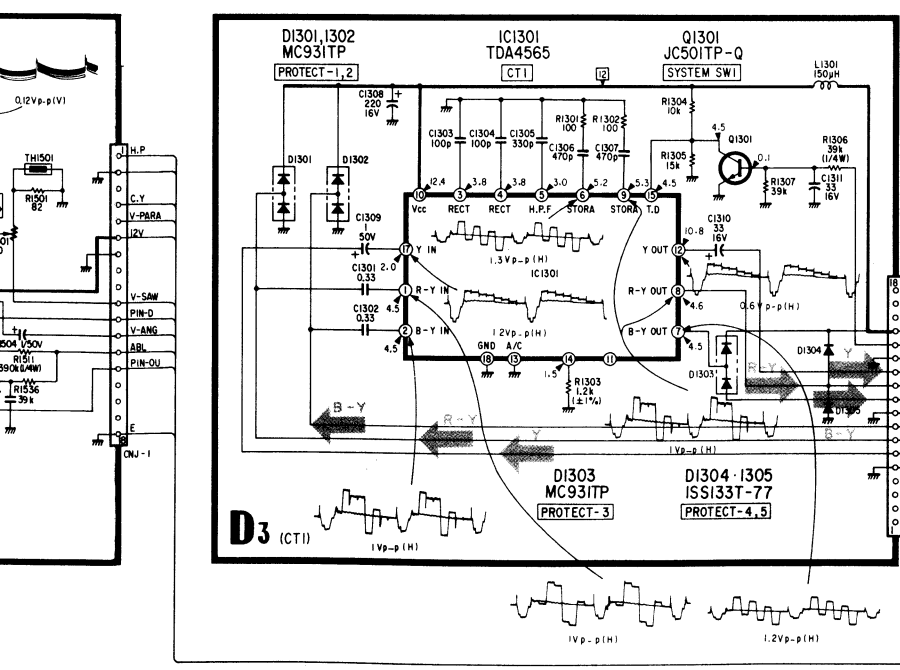
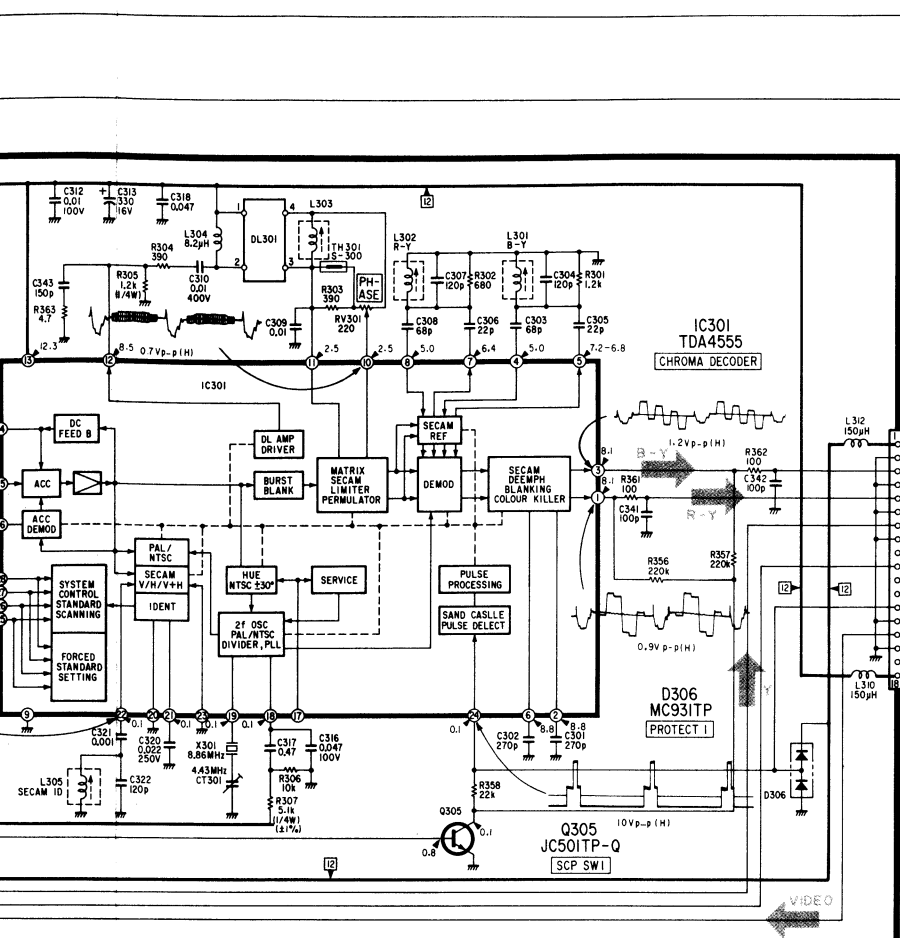


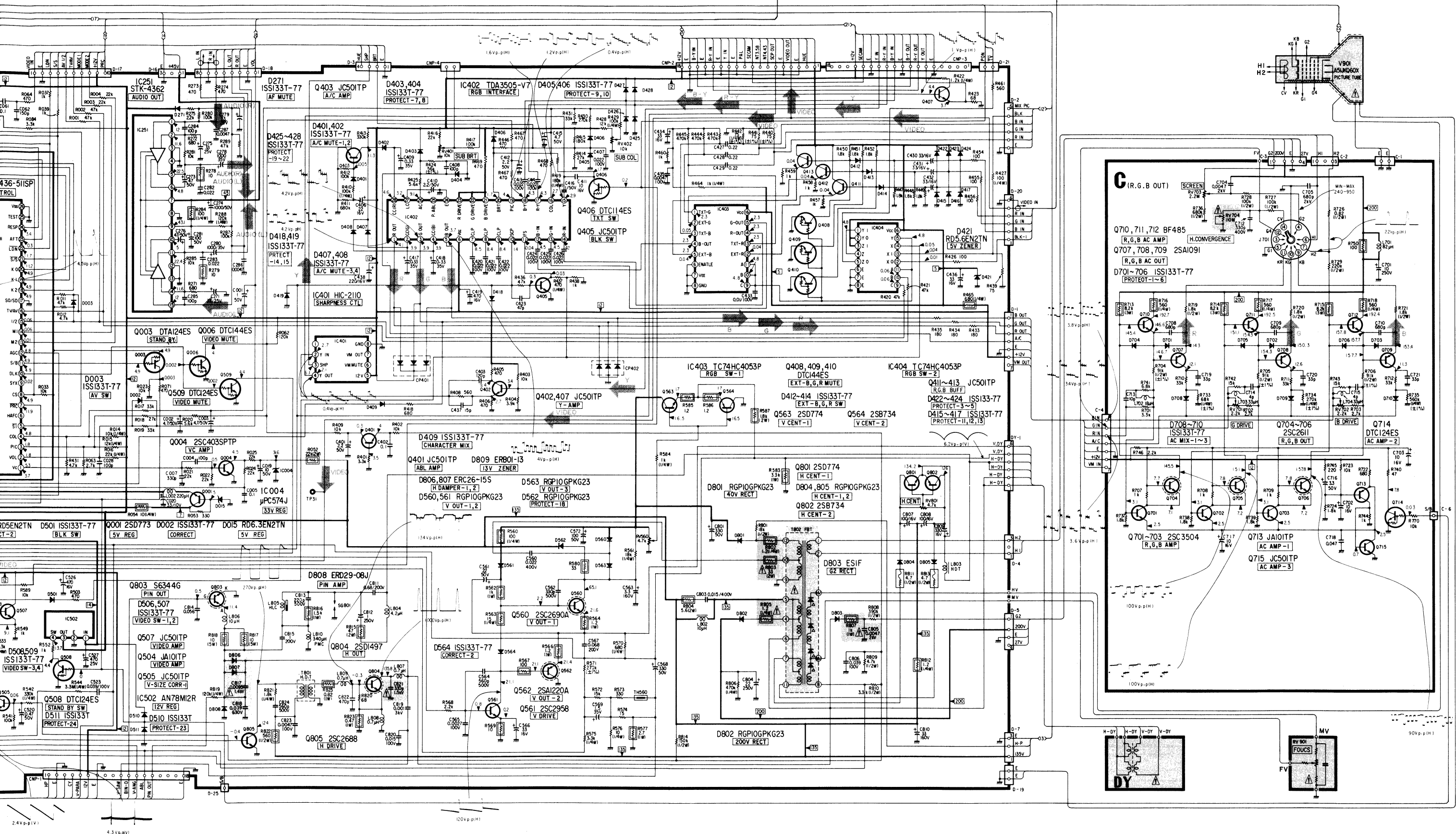
X NOTE		LANGUAGE SET		
LANGUAGE	A	B	C	IC003
SWEDISH	SHORT	OPEN	SHORT	SAAS240A
GERMAN	OPEN	SHORT	SHORT	SAAS240A/B



KV-21XRD/21XRTD/RM-664





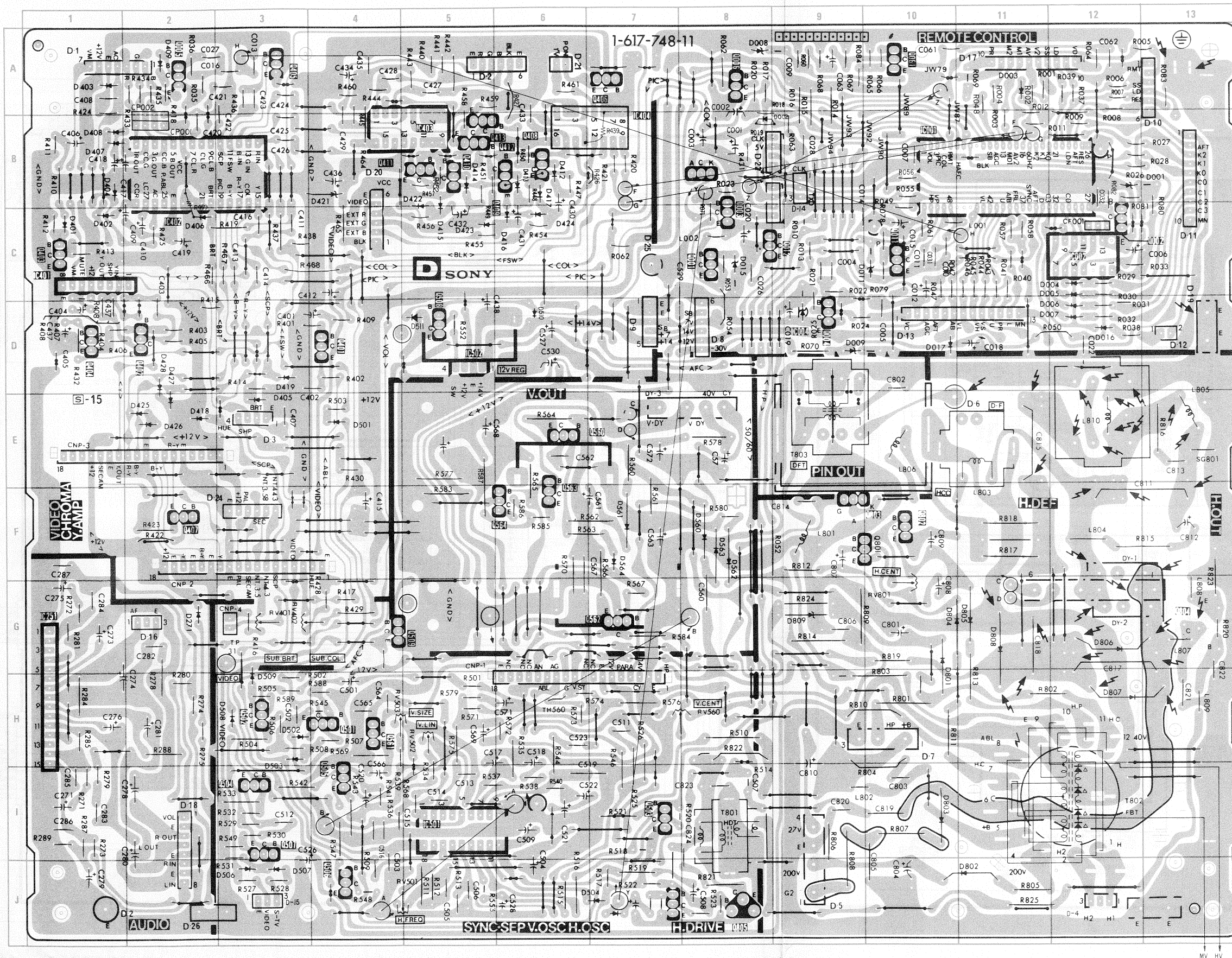


MOUNTING DIAGRAMS

Note: All mounting diagrams are viewed from conductor side.

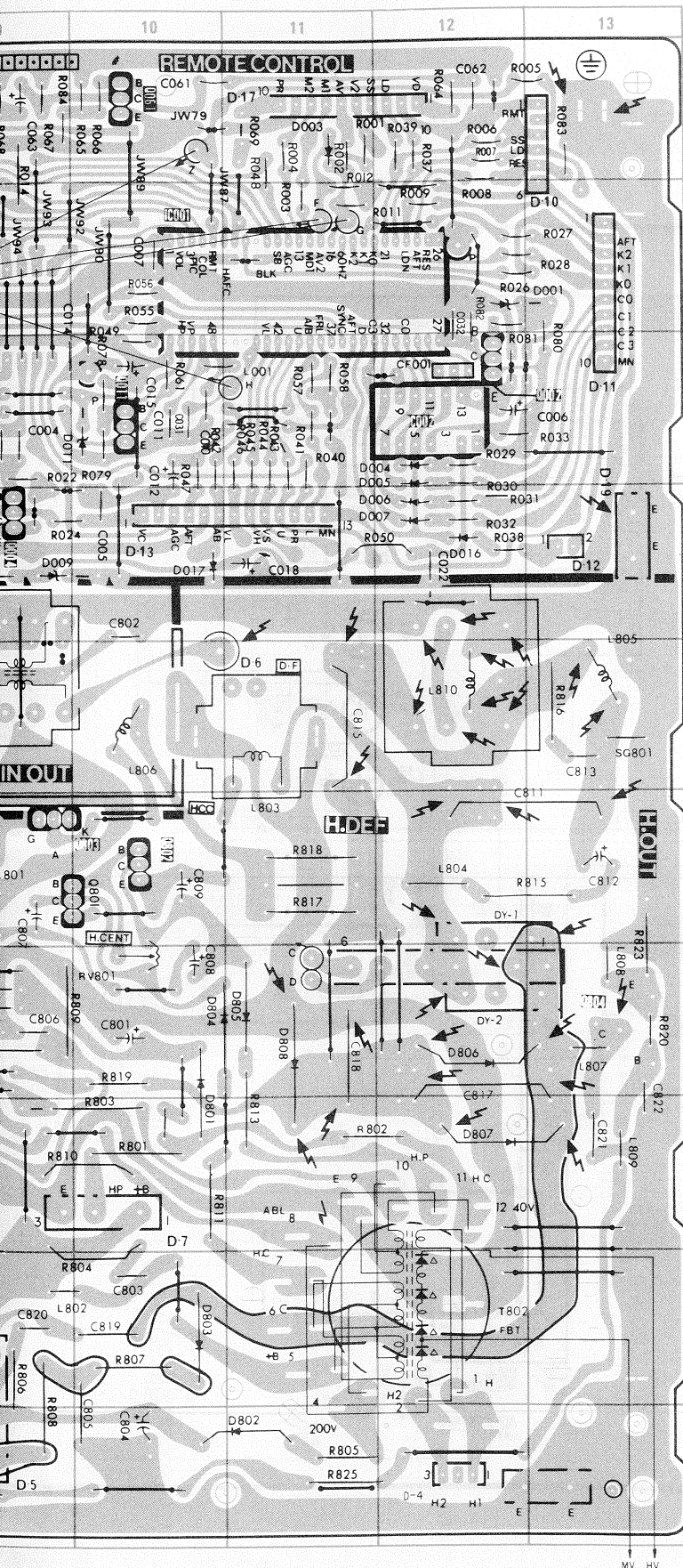
D

[CONTROL, MEMORY, R.G.B. INTERFACE]
AUDIO OUT, H/V DRIVE, PIN OUT



D

CAPACITOR				CONNECTOR			
C001	B-8	C434	A-4	CNP1	H-6	D503	H-3
C002	B-8	C435	A-4	CNP2	F-2	D504	J-7
C003	B-8	C436	B-4	CNP3	E-1	D506	J-3
C004	C-9	C437	D-1	CNP4	G-3	D507	J-3
C005	D-10	C438	D-5	D1	A-1	D508	H-3
C006	C-12	C501	H-4	D2	A-5	D509	H-3
C007	B-10	C502	H-3	D3	E-3	D510	D-6
C009	A-9	C503	J-4	D4	J-12	D560	F-8
C010	C-10	C504	J-6	D5	J-9	D561	F-7
C011	C-10	C505	J-5	D6	E-11	D562	F-8
C012	C-10	C506	J-5	D7	H-10	D563	F-8
C013	A-3	C507	I-8	D8	D-8	D564	F-7
C014	C-10	C508	J-8	D9	D-7	D801	G-10
C015	C-10	C509	I-6	D10	A-13	D802	J-11
C016	A-3	C511	H-7	D11	B-13	D803	I-10
C018	D-11	C512	I-3	D12	D-13	D804	G-10
C019	D-9	C513	I-5	D13	D-10	D805	G-11
C020	C-8	C514	I-5	D14	B-9	D806	G-12
C022	D-12	C515	I-5	D15	J-3	D807	H-12
C026	C-8	C516	J-4	D16	G-2	D808	G-11
C027	A-2	C517	H-5	D17	A-11	D809	G-9
C028	B-9	C518	H-6	D18	I-2	IC	
C031	C-10	C519	I-6	D19	D-13	IC001	B-11
C032	B-12	C520	I-4	D20	B-4	IC002	C-12
C061	A-10	C521	I-6	D21	A-6	IC004	D-9
C062	A-12	C522	I-6	D22	B-8	IC251	G-1
C063	A-9	C523	H-6	D24	F-3	IC401	C-1
C271	I-1	C526	J-3	D25	C-7	IC402	B-2
C273	G-1	C527	D-6	D26	J-2	IC403	B-5
C274	H-1	C528	J-6	DY1	F-12	IC404	B-7
C275	G-1	C529	C-8	DY2	G-12	IC501	I-5
C276	H-1	C530	D-6	DY3	E-7	IC502	D-5
C278	I-2	C560	G-8			MODULE	
C279	J-1	C561	F-7	DIODE		IC401 C-1	
C280	I-2	C562	E-6	D001	B-12	COIL	
C281	H-2	C563	F-7	D002	B-8	L001	C-11
C282	G-2	C564	H-4	D003	A-11	L002	C-8
C283	I-1	C565	H-4	D004	C-12	L401	D-2
C284	G-1	C566	I-4	D005	C-12	L801	F-9
C285	I-1	C567	F-6	D006	D-12	L802	I-9
C286	I-1	C568	E-5	D007	D-12	L803	E-11
C287	F-1	C569	H-5	D008	A-8	L804	F-12
C401	D-4	C570	E-8	D009	D-9	L805	E-13
C402	D-4	C571	H-6	D011	C-10	L806	E-10
C403	D-2	C572	E-7	D015	C-8	L807	G-13
C404	D-1	C801	G-10	D016	D-12	L808	G-13
C405	D-1	C802	D-10	D017	D-10	L809	H-13
C406	B-1	C803	I-10	D271	G-2	L810	E-12
C407	E-3	C804	J-10	D401	C-1	TRANSISTOR	
C408	A-1	C805	J-10	D402	C-1	Q001	C-8
C409	C-2	C806	G-9	D403	A-1	Q002	C-12
C410	C-2	C807	F-9	D404	B-1	Q003	C-8
C411	C-3	C808	G-10	D405	E-3	Q004	D-9
C412	C-4	C809	F-10	D406	C-2	Q005	A-2
C413	C-3	C810	I-9	D407	B-1	Q006	A-8
C414	C-3	C811	F-13	D408	B-1	Q011	C-10
C415	F-4	C812	F-13	D409	A-2	Q012	C-8
C416	C-3	C813	E-13	D412	B-6	Q061	A-10
C417	C-2	C814	F-9	D413	B-6	Q401	D-4
C418	B-1	C815	E-11	D414	B-5	Q402	D-2
C419	C-2	C817	G-12	D415	C-5	Q403	C-1
C420	B-2	C818	G-11	D416	C-6	Q404	D-1
C421	A-3	C819	I-10	D417	B-6	Q405	A-3
C422	B-3	C820	I-9	D418	E-2	Q406	A-7
C423	A-3	C821	H-13	D419	D-3	Q407	F-2
C424	A-3	C822	H-13	D421	B-4	Q408	B-6
C425	B-3	C823	I-8	D422	C-5	Q409	B-6
C426	B-3	C824	I-8	D423	C-5		
C427	A-5	FILTER		D424	C-6		
C428	A-4	CF001	C-12	D425	E-2		
C429	B-4			D426	E-2		
C430	C-6			D427	E-2		
C431	C-6			D428	D-2		
C432	C-5			D501	E-4		
C433	B-6			D502	H-3		

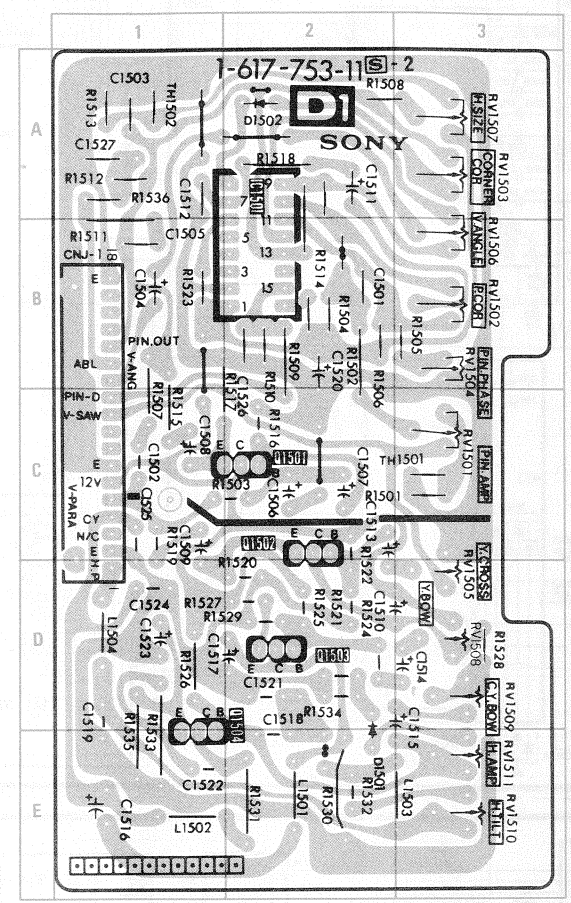


D

CAPACITOR		CONNECTOR		DIODE		MODULE		COIL		TRANSISTOR		THERMISTOR		CONDUCTOR SIDE	
C001	B-8	C434	A-4	D503	H-3	Q410	B-5	R053	C-8	R437	C-3	R562	F-6	TH560	H-6
C002	B-8	C435	A-4	D504	J-7	Q411	B-5	R054	D-8	R438	C-3	R563	F-6		
C003	B-8	C436	B-4	D506	J-3	Q412	B-5	R055	B-10	R440	A-5	R564	E-6		
C004	C-9	C437	D-1	D507	J-3	Q413	B-5	R056	B-10	R441	A-5	R565	E-6		
C005	D-10	C438	D-5	D508	H-3	Q501	H-4	R057	C-11	R442	A-5	R566	F-7		
C006	C-12	C501	H-4	D509	H-3	Q502	H-3	R058	C-11	R443	A-5	R567	G-7		
C007	B-10	C502	H-3	D510	D-6	Q503	I-7	R060	A-9	R444	A-4	R568	I-5		
C008	A-9	C503	J-4	D560	F-8	Q504	I-3	R061	C-10	R445	B-4	R569	H-4		
C010	C-10	C504	J-6	D561	F-7	Q505	I-4	R062	C-7	R447	B-6	R570	F-6		
C011	C-10	C505	J-5	D562	F-8	Q506	I-4	R063	B-9	R448	B-6	R571	H-5		
C012	C-10	C506	J-5	D563	F-8	Q507	I-3	R064	A-12	R449	B-5	R572	H-6		
C013	A-3	C507	I-8	D564	F-7	Q508	D-5	R065	A-10	R450	B-6	R573	H-6		
C014	C-10	C508	J-8	D801	G-10	Q509	G-4	R066	A-10	R451	B-5	R574	H-7		
C015	C-10	C509	I-6	D802	J-11	Q560	E-6	R067	A-9	R452	B-5	R575	H-5		
C016	A-3	C511	H-7	D803	I-10	Q561	H-4	R068	A-9	R454	C-6	R576	H-7		
C018	D-11	C512	I-3	D804	G-10	Q562	G-7	R069	A-11	R455	C-5	R577	E-5		
C019	D-9	C513	I-5	D805	G-11	Q563	F-6	R070	D-9	R456	C-5	R578	E-8		
C020	C-8	C514	I-5	D806	G-12	Q564	F-6	R071	C-8	R457	B-5	R579	H-5		
C022	D-12	C515	I-5	D807	H-12	Q801	F-10	R078	C-10	R458	B-5	R580	F-8		
C026	C-8	C516	J-4	D808	G-11	Q802	F-10	R079	C-10	R459	A-5	R583	F-5		
C027	A-2	C517	H-5	D809	G-9	Q803	F-9					R584	G-7		
C028	B-9	C518	H-6			Q804	G-13					R585	F-6		
C031	C-10	C519	I-6									R586	F-6		
C032	B-12	C520	I-4									R587	E-5		
C061	A-10	C521	I-6									R588	H-4		
C062	A-12	C522	I-6									R589	H-3		
C063	A-9	C523	H-6									R801	H-10		
C271	I-1	C524	J-3									R802	H-11		
C273	G-1	C525	D-6									R803	H-10		
C274	H-1	C526	J-6									R804	I-10		
C275	G-1	C527	J-6									R805	J-11		
C276	G-1	C528	J-6									R806	I-9		
C277	G-1	C529	C-8									R807	I-10		
C278	I-2	C530	D-6									R808	J-9		
C279	J-1	C531	G-8									R809	G-9		
C280	I-2	C561	F-7									R810	H-9		
C281	H-2	C562	E-6									R811	H-10		
C282	G-2	C563	F-7									R812	F-9		
C283	I-1	C564	H-4									R813	H-11		
C284	G-1	C565	I-4									R814	G-9		
C285	I-1	C566	F-6									R815	F-13		
C286	I-1	C567	E-5									R816	E-13		
C287	F-1	C568	H-5									R817	F-11		
C401	D-4	C569	E-8									R818	F-11		
C402	D-4	C570	E-8									R819	G-10		
C403	D-2	C571	H-6									R820	G-13		
C404	D-1	C572	E-7									R821	J-8		
C405	D-1	C801	G-10									R822	H-8		
C406	B-1	C802	D-10									R823	G-13		
C407	E-3	C803	I-10									R824	G-9		
C408	A-1	C804	J-10									R825	J-11		
C409	C-2	C805	J-10												
C410	C-2	C806	G-9												
C411	C-3	C807	F-9												
C412	C-4	C808	G-10												
C413	C-3	C809	F-10												
C414	C-3	C810	I-9												
C415	F-4	C811	F-13												
C416	C-3	C812	F-13												
C417	C-2	C813	E-13												
C418	B-1	C814	F-9												
C419	C-2	C815	E-11												
C420	B-2	C817	G-12												
C421	A-3	C818	G-11												
C422	B-3	C819	I-10												
C423	A-3	C820	I-9												
C424	A-3	C821	H-13												
C425	B-3	C822	H-13												
C426	B-3	C823	I-8												
C427	A-5	C824	I-8												
C428	A-4														
C429	B-4														
C430	C-6														
C431	C-6														
C432	C-5														
C433	B-6														

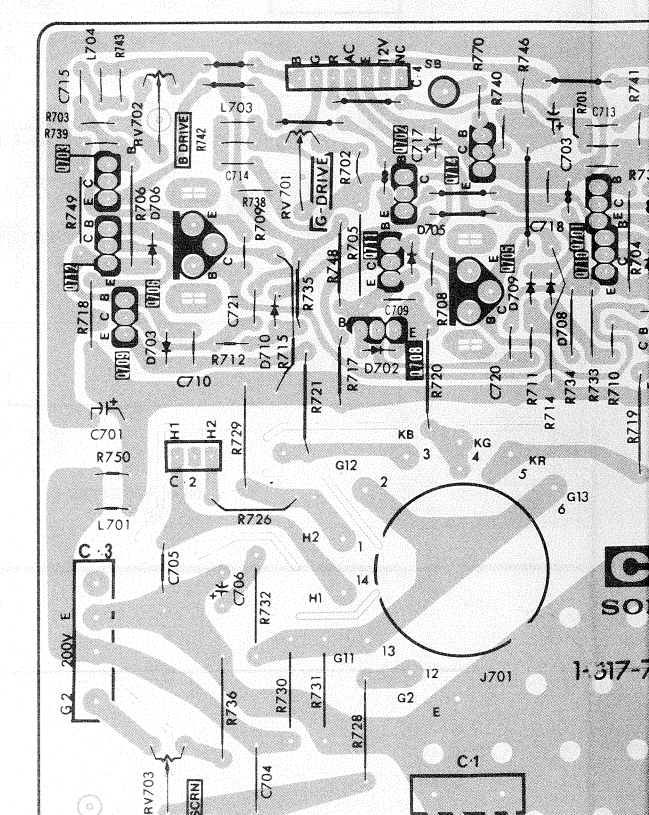
D1

[PIN AMP]



C

[R.G.B OUT]



PIN PHAS
Adjust PIN PH

PIN AMP
Adjust PIN AM

V. ANGLE
Adjust V. AN

PIN COR
Adjust PIN CO

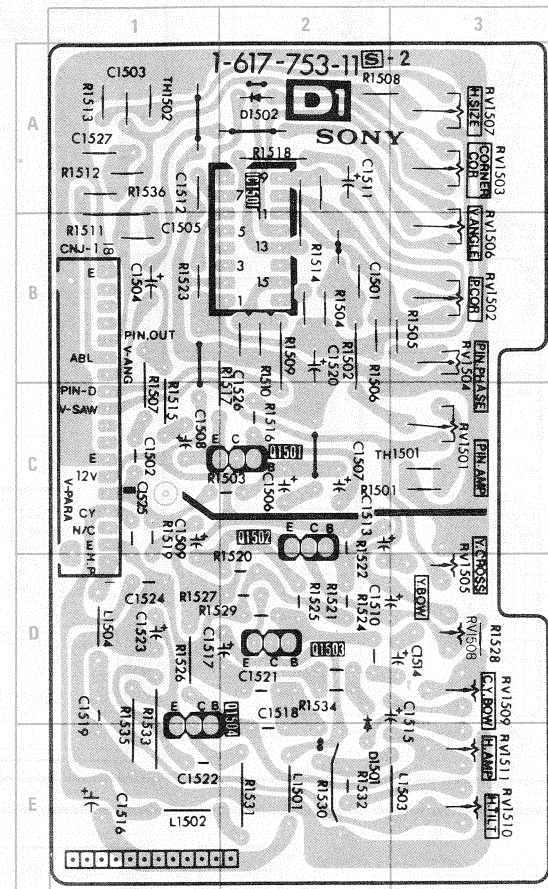
FREQUENCY IC501 = I-5, RV501 = J-5

Connect a jumper to IC501 pin (5) and the ground.

KV-21XRD/21XRTD/RM-664

D1

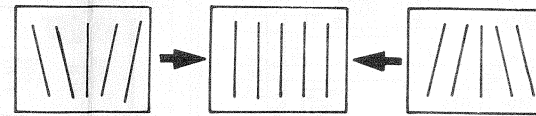
[PIN AMP]



PIN PHASE

RV1504 = B-3

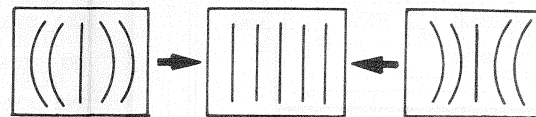
Adjust PIN PHASE with RV1504.



PIN AMP

RV1501 = C-3

Adjust PIN AMP with RV1501.



V. ANGLE

RV1506 = B-3

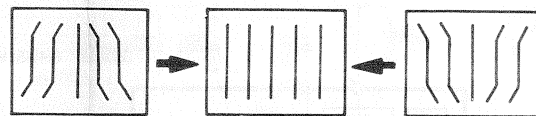
Adjust V. ANGLE with RV1506.



PIN CORRECT

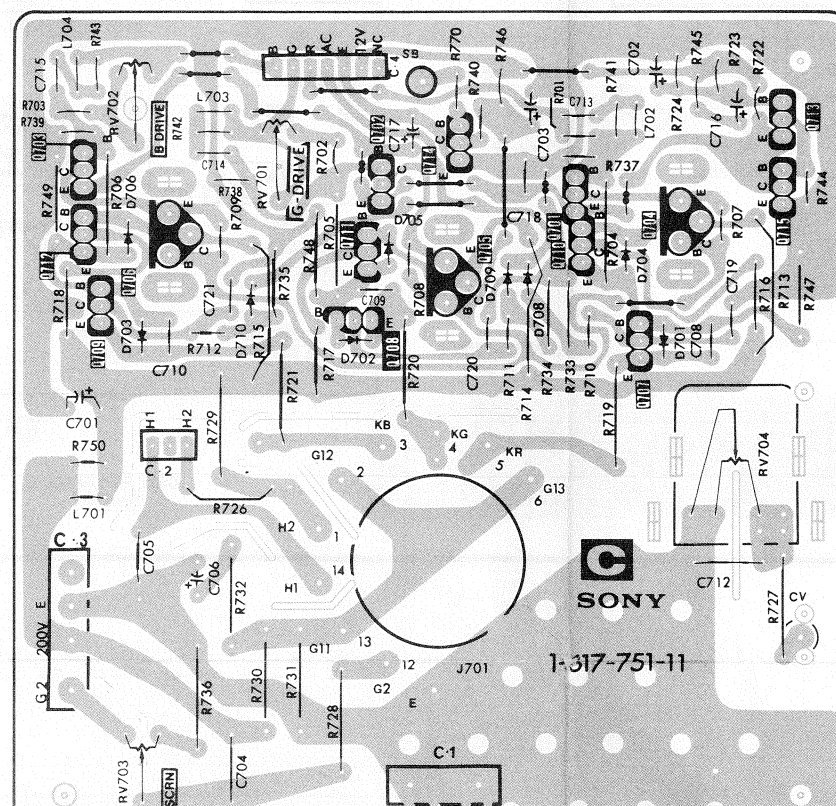
RV1502 = B-3

Adjust PIN CORRECT with RV1502.



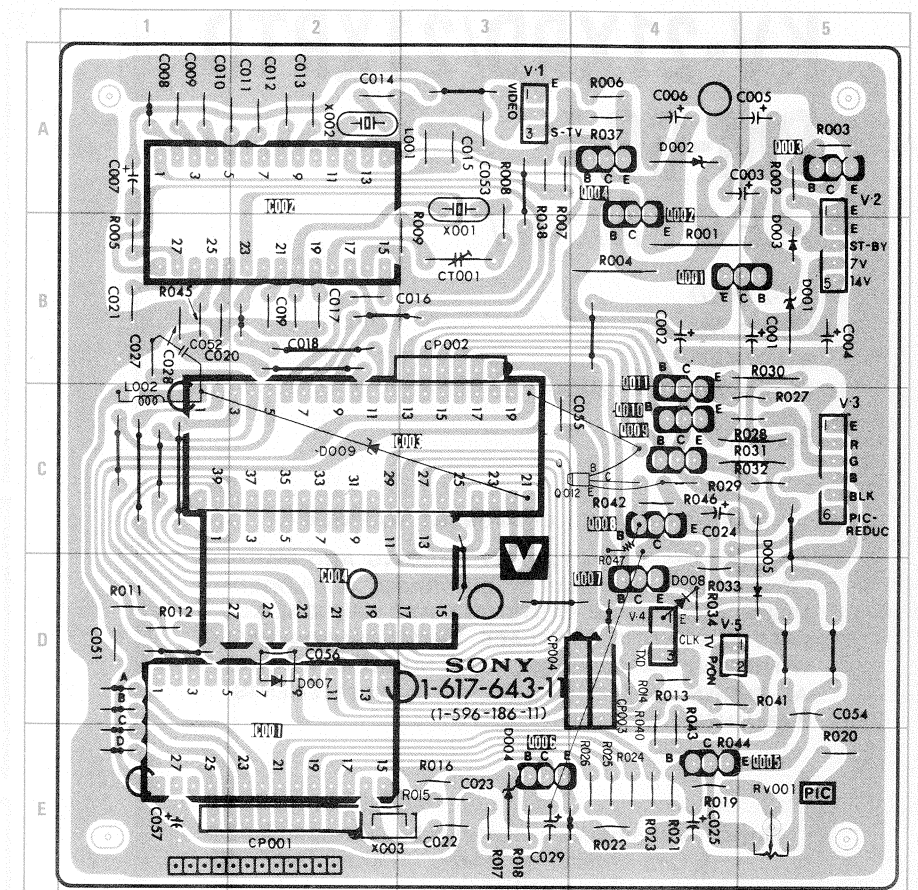
C

[R.G.B OUT]



V

[CCT, VIDEO PROCESSOR] KV-21XRTD ONLY



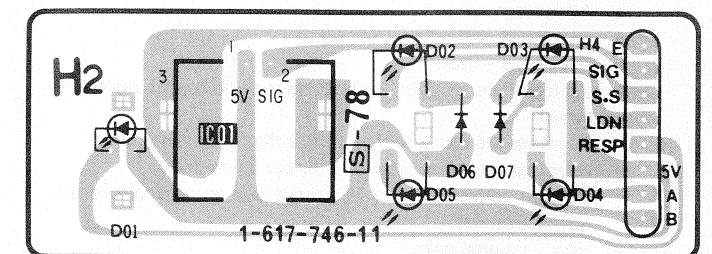
6MHz CLOCK

V-1 = A-3, IC002 = B-2, CT001 = B-3

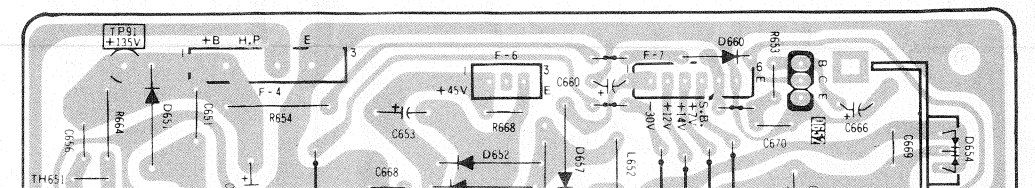
1. Disconnect V-1 connector of V board.
2. Connect frequency counter across pin ⑪ of IC002 and ground.
3. Adjust CT001 for $6.0\text{MHz} \pm 2.0\text{kHz}$ on the frequency counter.

H2

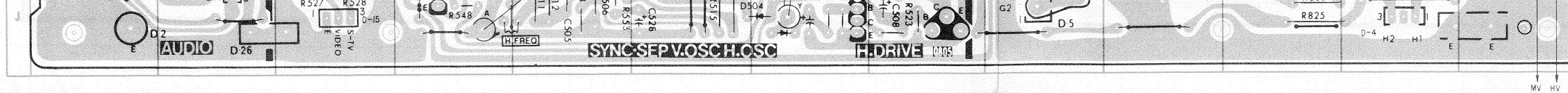
[R/C RECEIVE]

**F**

[REG OUT]



R053 C-8		R437 C-3		R562 F-6		THERMISTOR	
R054 D-8		R438 C-3		R563 F-6		TH560 H-6	
R055 B-10		R440 A-5		R564 E-6			
R056 B-10		R441 A-5		R565 E-6		CONDUCTOR SIDE	
R057 C-11		R442 A-5		R566 F-7			
R058 C-11		R443 A-5		R567 G-7		R439 B-7 R469 B-2 R553 J-5 D511 D-5	
R060 A-9		R444 A-4		R568 I-5			
R061 C-10		R445 B-4		R569 H-4			
R062 C-7		R447 B-6		R570 F-6			
R063 B-9		R448 B-6		R571 H-5			
R064 A-12		R449 B-5		R572 H-6			
R065 A-10		R450 B-6		R573 H-6			
R066 A-10		R451 B-5		R574 H-7			
R067 A-9		R452 B-5		R575 H-5			
R068 A-9		R454 C-6		R576 H-7			
R069 A-11		R455 C-5		R577 E-5			
R070 D-9		R456 C-5		R578 E-8			
R071 C-8		R457 B-5		R579 H-5			
R078 C-10		R458 B-5		R580 F-8			
R079 C-10		R459 A-5		R583 F-5			
R080 C-13		R460 A-4		R584 G-7			
R081 B-12		R461 A-6		R585 F-6			
R082 B-12		R464 B-4		R586 F-6			
R083 A-13		R465 C-4		R587 E-5			
R084 A-9		R468 C-4		R588 H-4			
R271 I-1		R502 H-3		R589 H-3			
R272 G-1		R503 E-4		R801 H-10			
R273 I-1		R504 H-3		R802 H-11			
R274 H-2		R505 H-3		R803 H-10			
R275 H-2		R506 H-3		R804 I-10			
R278 H-2		R507 H-4		R805 J-11			
R279 I-1		R508 H-3		R806 I-9			
R280 H-2		R509 J-4		R807 I-10			
R281 G-1		R510 H-8		R808 J-9			
R284 H-1		R511 J-5		R809 G-9			
R285 H-1		R512 J-5		R810 H-9			
R287 I-1		R513 J-5		R811 H-10			
R288 H-2		R514 H-8		R812 F-9			
R289 I-1		R515 J-6		R813 H-11			
R401 D-4		R516 J-6		R814 G-9			
R402 D-4		R517 J-7		R815 F-13			
R403 D-2		R518 I-7		R816 E-13			
R404 D-1		R519 J-7		R817 F-11			
R405 D-2		R520 I-8		R818 F-11			
R406 D-1		R521 I-7		R819 G-10			
R407 D-1		R522 J-7		R820 G-13			
R408 D-1		R523 J-8		R821 J-8			
R409 D-4		R525 I-7		R822 H-8			
R410 B-1		R526 H-7		R823 G-13			
R411 B-1		R527 J-3		R824 G-9			
R412 C-1		R528 J-3		R825 J-11			
R413 C-1		R529 I-3		VARIABLE RESISTOR			
R414 D-3		R530 I-3					
R415 D-2		R531 J-3		RV401 G-3 RV402 G-3 RV501 J-5 RV502 H-5 RV503 H-4 RV560 H-8 RV801 G-10			
R416 G-3		R532 I-3					
R417 G-4		R533 I-3		SPARK GAP			
R418 A-2		R534 I-5					
R419 C-3		R535 H-6		SG801 E-13			
R420 B-7		R536 I-4					
R421 B-7		R537 I-5		TRANSFORMER			
R422 F-2		R538 I-6					
R423 F-2		R539 I-4		T801 I-8 T802 I-12 T803 E-9			
R424 A-1		R540 I-6					
R425 C-2		R541 I-4					
R426 B-7		R542 I-3					
R427 A-6		R543 I-4					
R428 G-4		R544 H-6					
R429 G-4		R545 H-4					
R430 E-4		R546 I-7					
R431 B-8		R547 I-4					
R432 D-1		R548 J-4					
R433 A-2		R549 I-3					
R434 A-2		R552 D-5					
R435 A-2		R560 E-7					
R436 A-3		R561 F-7					



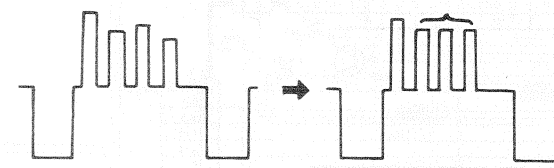
C429	C-6	D426	F-2	Q406	A-7
C430	C-6	D427	F-2		
C431	C-6	D428	D-2	Q407	F-2
C432	C-5	D501	F-4	Q408	B-6
C433	B-6	D502	H-3	Q409	B-6

SUB BRIGHT IC402 = B-2, RV401 = G-3

1. Receive a dot signal.
2. PICTURE control normal
COLOR control normal
BRIGHTNESS control center click
3. Connect an digital multimeter at pin (20) of IC402.
4. Adjust RV401 to 1.7V dc.

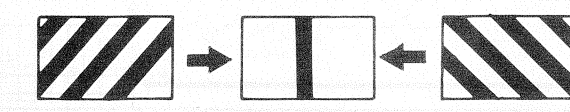
SUB COLOR ADJUSTMENT IC402 = B-2, RV402 = G-3

1. Receive a color bar signal.
2. PICTURE control normal
COLOR control normal
BRIGHTNESS control center click
3. Connect an oscilloscope at pin (17) of IC402.
4. Adjust RV402 so that same level as shown.



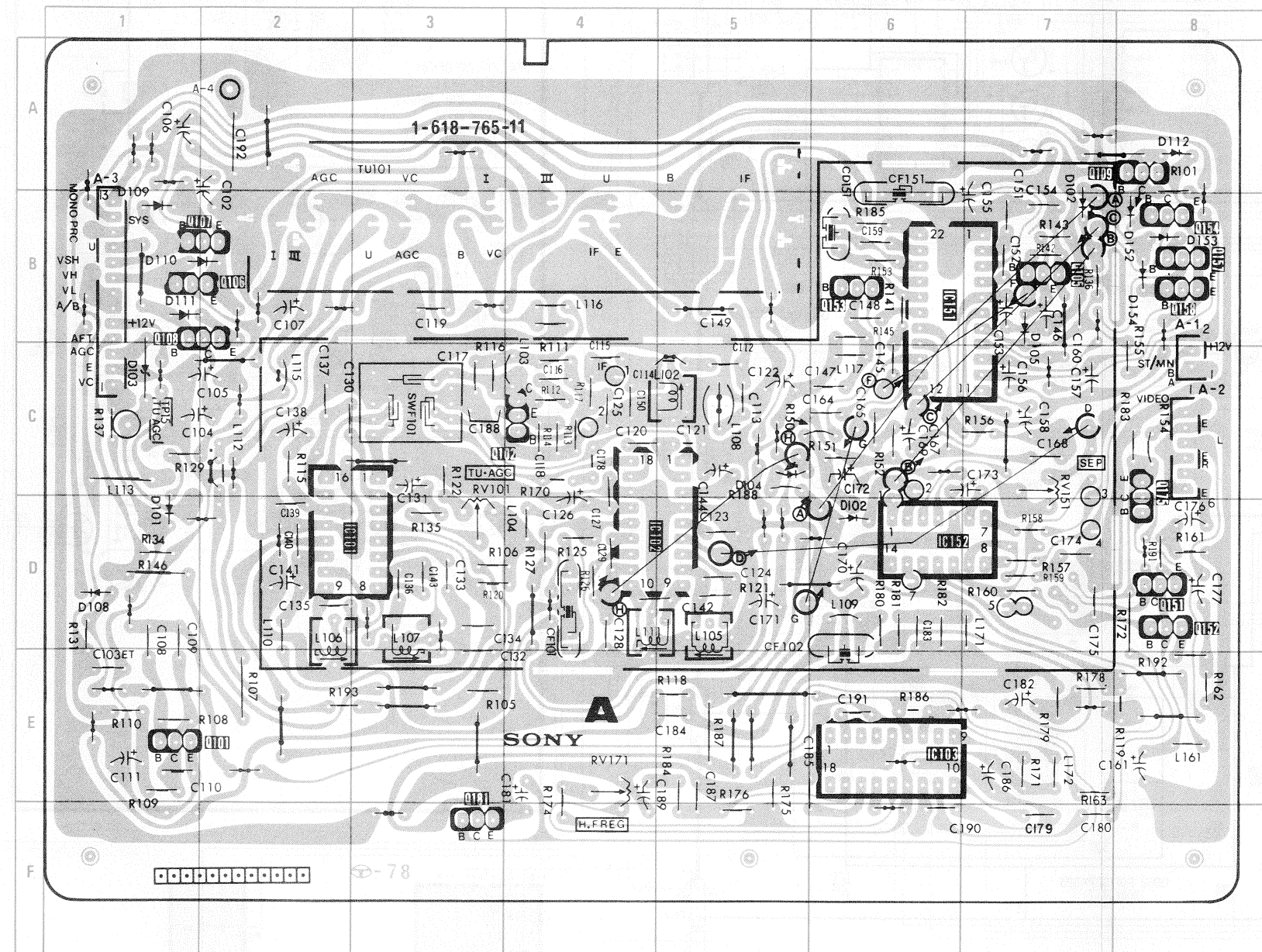
H FREQUENCY IC501 = I-5, RV501 = J-5

1. Connect a jumper to IC501 pin (5) and the ground.
2. Adjust H FREQUENCY VR (RV501) for stable picture.

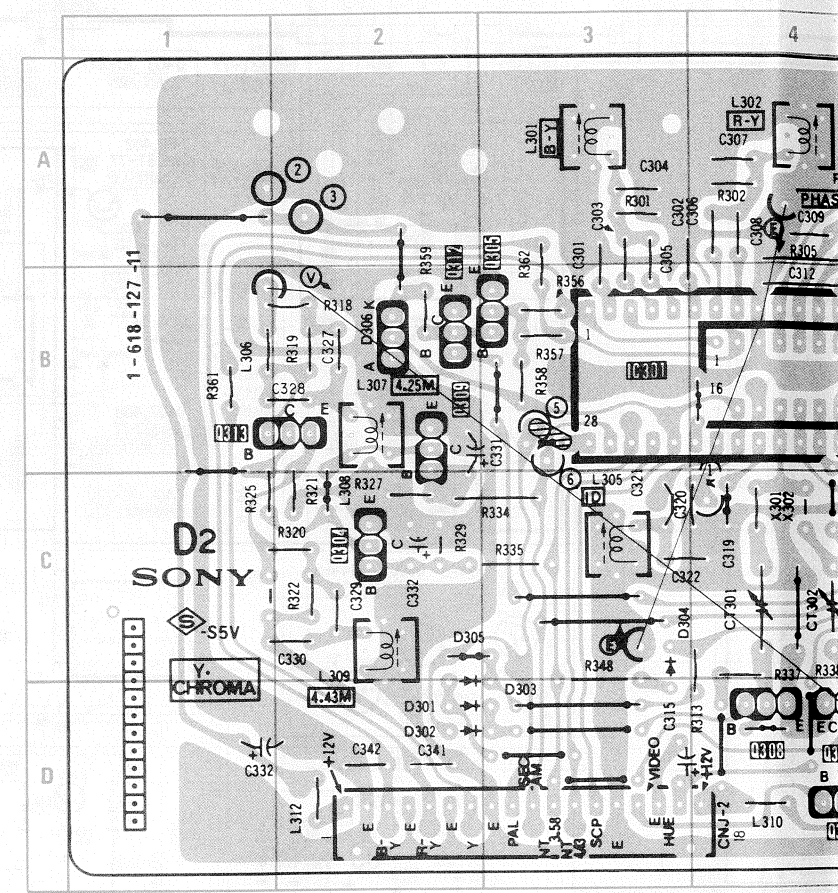


3. After completing this adjustment, disconnect a jumper wire from D board.

A [BAND SW, VIF, QPT, SIF, ID SIF]



D2 [CHROMA DECODER]



REF OSC IC301 = B-3, CT301 = C-4

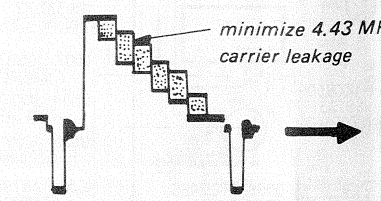
1. Receive a color bar signal.
2. Ground pin (1) of IC301 and turn color killer OFF.
3. Adjust CT301 so that the movement of picture on the CRT becomes the slowest.

1H DELAY LINE IC301 = B-3, L303 = A-5, RV301 = A-5

1. Receive a color bar signal.
2. Observe the pin (3) IC301 waveform on the oscilloscope, and adjust so that the chroma component becomes minimum with L303.
3. Get tracking with both L303 and RV301 as shown.

Y TRAP CNJ-2 = D-3, L303

1. Receive a color bar signal.
2. Observe the pin (7) CNJ-2 wave and adjust L303 for minimum 4.43 MHz carrier leakage



TU. AGC RV101 = D-3

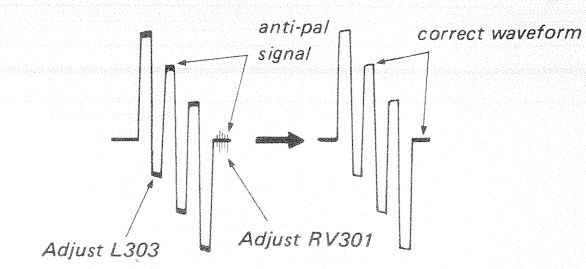
1. Tune in an off-air signal.
2. Adjust RV101 so that snow-noise and cross-modulation just disappear from picture.

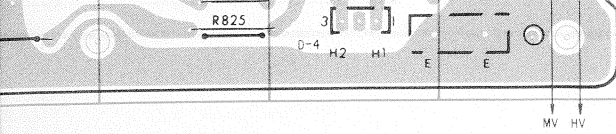
SEPARATION ADJUSTMENT IC152 = D-6, RV151 = C-7

1. Receive a stereo signal (L-CH 1kHz, R-CH 400Hz).
2. Confirm the stereo indicator.
3. Confirm the output 1kHz signal at pin (9) of IC152.
4. Adjust RV151 so that minimum 1kHz signal at pin (10) of IC152.

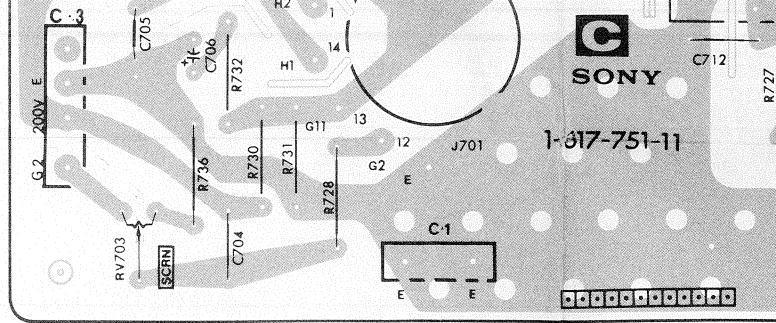
SIF ADJUSTMENT L105 = D-5

1. Tune in an off-air signal.
2. Adjust L105 for maximum clear-sound.



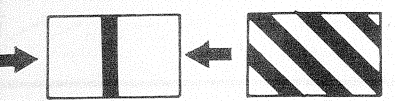


C430	C	A-7	Q406	F-2	R048	A-11	R435	A-2	R552	D-5
C431	C	F-2	Q407	F-2	R049	C-10	R436	A-3	R560	F-7
C432	C	B-6	Q408	B-6	R050	D-12			R561	F-7
C433	B	B-6	Q409	B-6	R052	F-9				



IC501 = I-5, RV501 = J-5

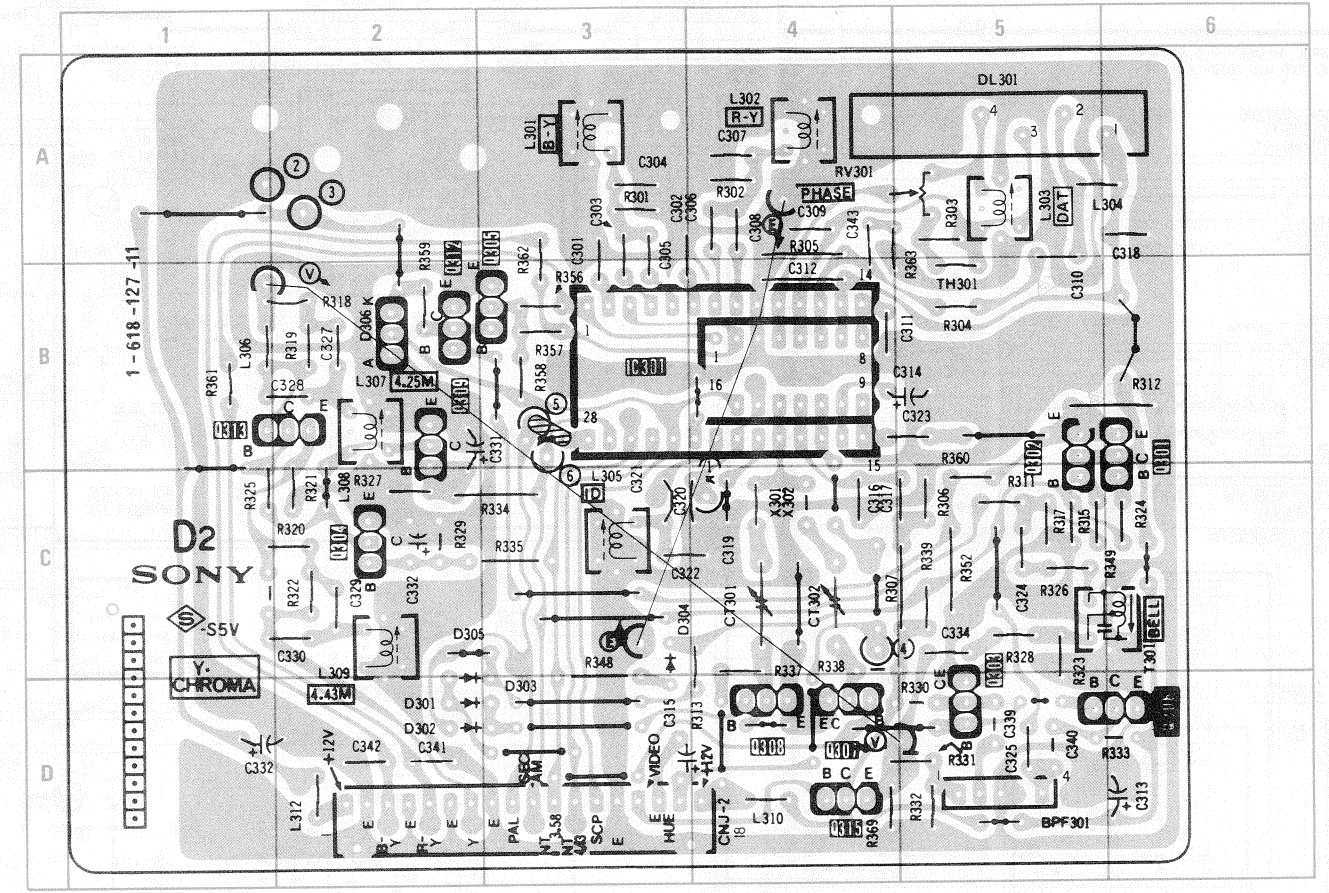
er to IC501 pin ⑤ and the ground.
QUENCY VR (RV501) for stable picture.



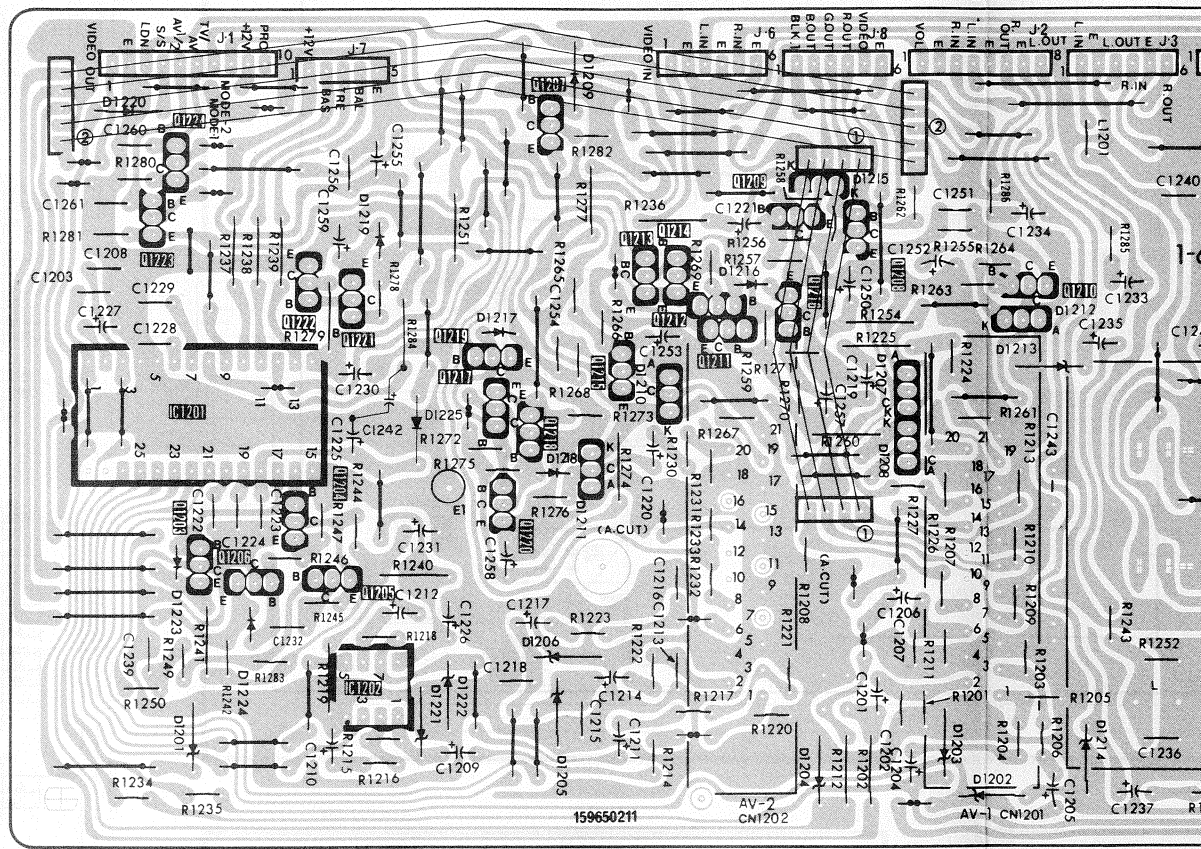
fo: suitable
(fo = 15,700 ± 25Hz)

ing this adjustment, disconnect a jumper
rd.

D2 [CHROMA DECODER]



J1 [INTERFACE, TV/AV SW]

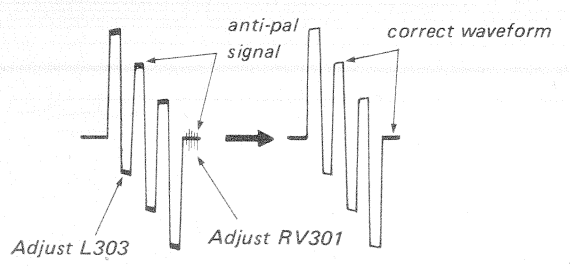


REF OSC IC301 = B-3, CT301 = C-4

1. Receive a color bar signal.
2. Ground pin ① of IC301 and turn color killer OFF.
3. Adjust CT301 so that the movement of picture on the CRT becomes the slowest.

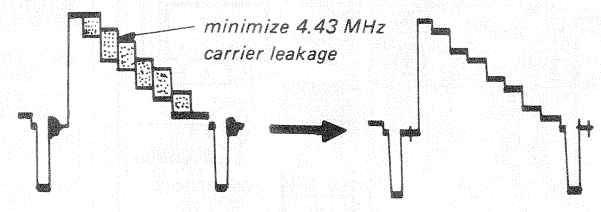
1H DELAY LINE IC301 = B-3, L303 = A-5, RV301 = A-5

1. Receive a color bar signal.
2. Observe the pin ③ IC301 waveform on the oscilloscope, and adjust so that the chroma component becomes minimum with L303.
3. Get tracking with both L303 and RV301 as shown.

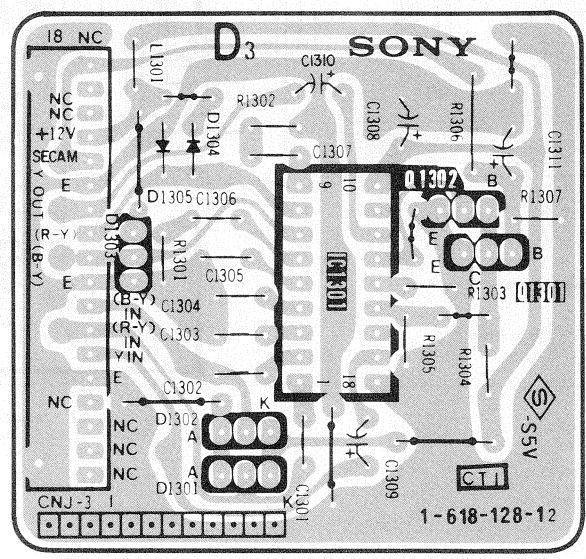


Y TRAP CNJ-2 = D-3, L309 = C-2

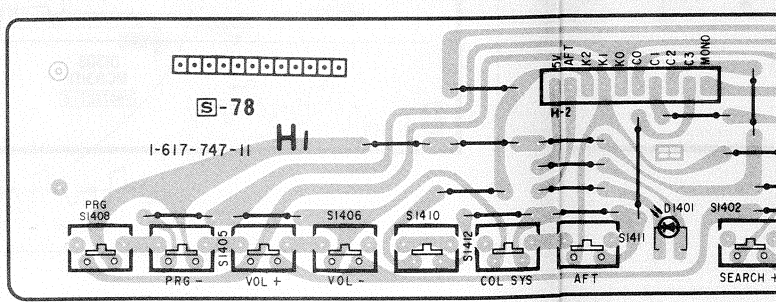
1. Receive a color bar signal.
2. Observe the pin ⑦ CNJ-2 waveform on the oscilloscope and adjust L309 for minimum 4.43MHz component.

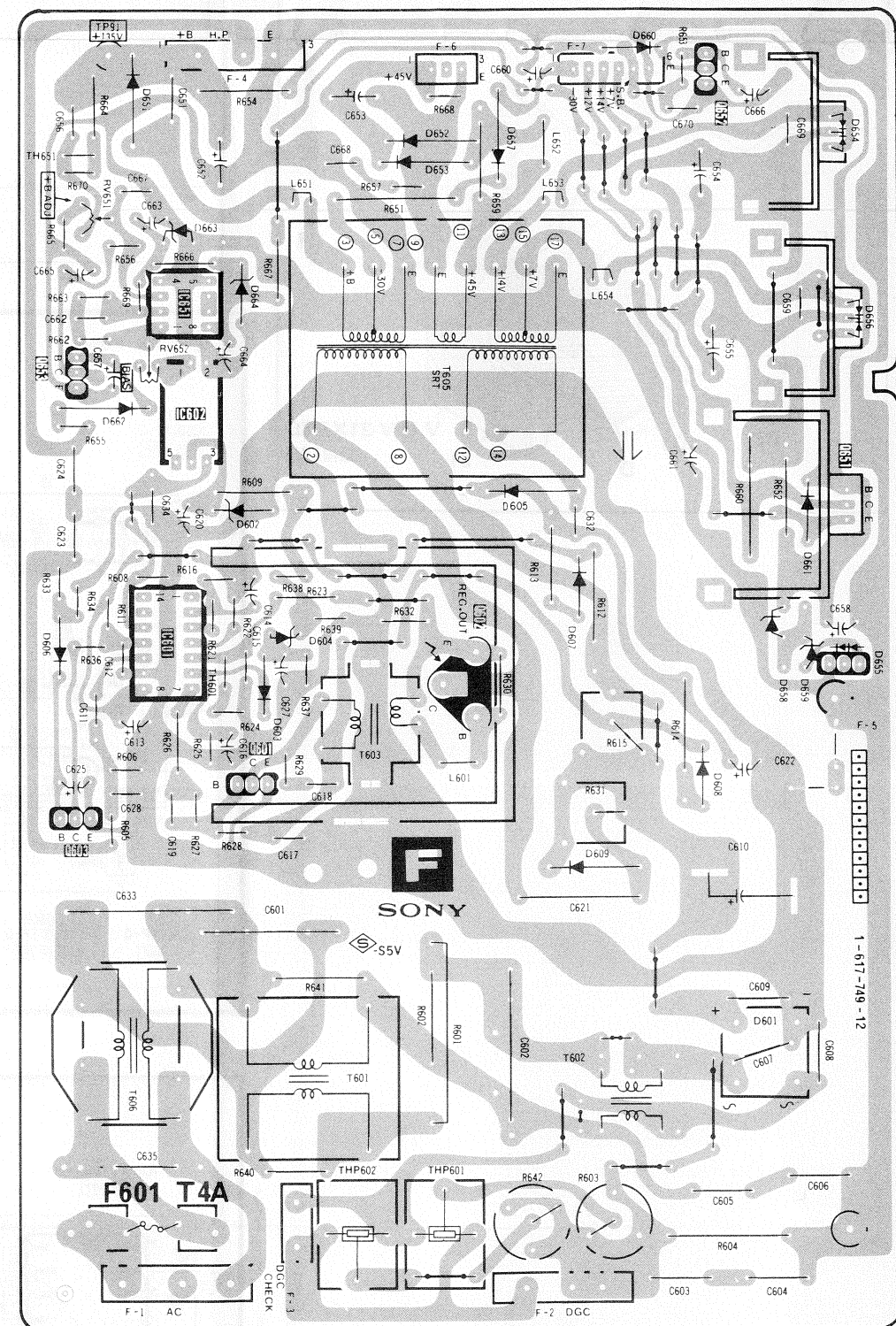


D3 [CTI]

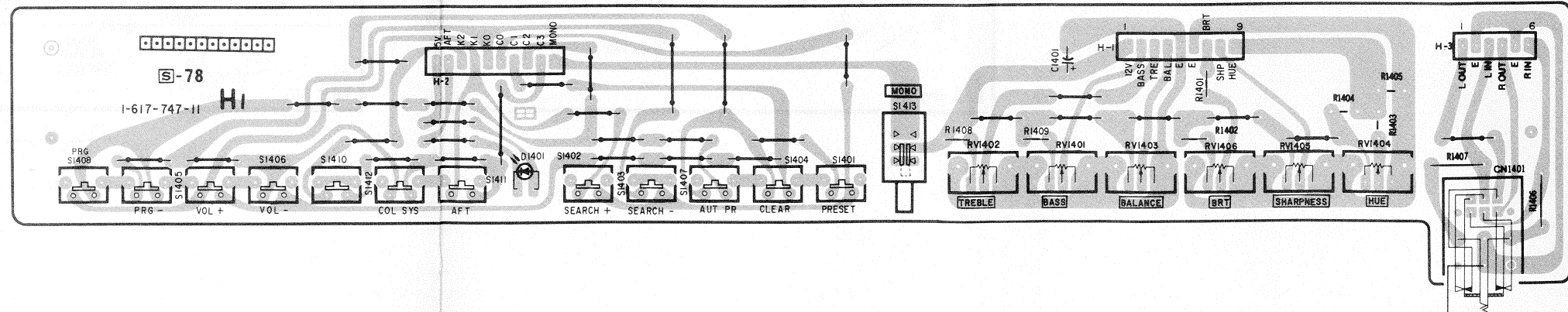
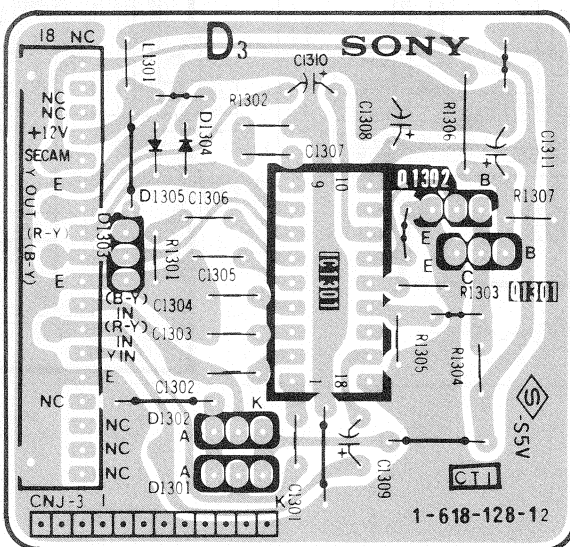
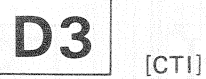


H1 [CONTROL INDICATOR]



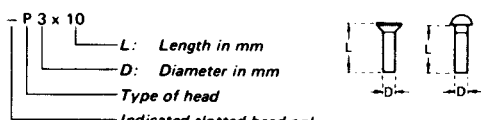


form on the oscilloscope
3MHz component.

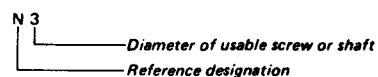














HARDWARE NOMENCLATURE














Screw:



Nut, Washer, Retaining ring:



Reference Designation	Shape	Description	Remarks
SCREWS			
P		pan-head screw	binding-head (B) screw for replacement
PWH		pan-head screw with washer face	binding-head (B) screw and flat washer for replacement
PS PSP		pan-head screw with spring washer	binding-head (B) screw and spring washer for replacement
PSW PSPW		pan-head screw with spring and flat washers	binding-head (B) screw and spring and flat washers for replacement
R		round-head screw	binding-head (B) screw for replacement
K		flat-countersunk-head screw	
RK		oval-countersunk-head screw	
B		binding-head screw	
T		truss-head screw	binding-head (B) screw for replacement
F		flat-fillister-head screw	
RF		fillister-head screw	
BV		brazier-head screw	

Reference Designation	Shape	Description	Remarks
SELF-TAPPING SCREWS			
TA		self-tapping screw	ex: TA, P 3 x 10
PTP		pan-head self-tapping screw	binding-head self-tapping (TA, B) screw for replacement
PTPWH		pan-head self-tapping screw with washer face	binding-head self-tapping (TA, B) screw and flat washer for replacement
PTTWH		pan-head thread-rolling screw with washer face	binding-head (B) screw and flat washer for replacement
SET SCREWS			
SC		set screw	
SC		hexagon-socket set screw	ex: SC 2.6 x 4, hexagon socket
NUT			
N		nut	
WASHERS			
W		flat washer	
SW		spring washer	
LW		internal-tooth lock washer	ex: LW3, internal
LW		external-tooth lock washer	ex: LW3, external
RETAINING RINGS			
E		retaining ring	
G		grip-type retaining ring	

